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ABSTRACT

A 4-year program for Mexican American children who have little or no knowledge of English has been established by the Region One Education Service Center in Texas. Designed to enroll students at the kindergarten level and carry them through 3rd grade, the program's components were Spanish reading, English as a second language (ESL), transitional English reading, and social education. The field testing of these programs comprised the objectives for 1971-72. Of the 124 objectives listed, only the product objectives which pertained directly to student achievement were evaluated in this report. Results of the Spanish Reading and Social Education End-of-Program Tests indicated that 80% of the students attained the desired objective, a score of 80% on the tests. Level I and Level II ESL program results indicated that if the students in the experimental group and control group had all had comparable pre-test scores, the post-test scores of the experimental group would have been significantly higher than those of the control group. The analysis of the final achievement test indicated that the results were within acceptable limits of the objective for the Transitional English Reading Program. Appendixes include the bilingual project staff, materials and equipment for project components, and status of objectives for 1971-72. A related document is ED 051 955. (Several pages may be light.) (HBC)

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REGION ONE BILINGUAL EDUCATION PROJECT OEG-0-9-530133-4206 (280)

1971-1972 FINAL EVALUATION REPORT

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REGION ONE BILINGUAL EDUCATION PROJECT OEG-0-9-530133-4206 (280)



1971-72 FINAL EVALUATION REPORT

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1971-72 FINAL EVALUATION REPORT

I. EDUCATIONAL CONTEXT

The Locale

The Texas Education Agency has divided the State of Texas into twenty geographic regions and has created an intermediate educational agency called an Education Service Center in each region. The Education Service Centers are designed to provide educational services which the school districts, because of limited resources, are unable to provide for themselves. The Region One Education Service Center is located in Edinburg, Texas and serves forty school districts in seven counties in southern Texas (Webb, Zapata, Jim Hogg, Starr, Hidalgo, Willacy, and Cameron Counties). This area includes four cities of 25,000 or more (Laredo, McAllen, Harlingen, and Brownsville) and ten cities of 10,000 or more. Data from the 1970 census indicated that persons of Spanish surname comprise 79% of the population in the three major metropolitan areas of Average (median) income for non-farm persons of Spanish surname was \$3,709 within the three metropolitan areas. This income level is lower than the federally designated poverty level of \$3,743 for a non-farm family of four. These statistics reveal that 49.9% of families of Spanish surname in the metropolitan areas fall below the poverty line, while 54.7% of all persons (family and individuals) of Spanish surname have incomes below the federal poverty level. The primary industry is agriculture and related enterprises (packing, canning, shipping).



U.S. Bureau of the Census. <u>Census Tracts:</u> <u>Brownsville-Harlingen-San Benito</u>, <u>Texas</u>, (PHC(1)-33; Washington: U.S. Government Printing Office, March, 1972).

²U.S. Bureau of the Census. <u>Census Tracts:</u> McAllen-Pharr-Edinburg, Texas, (PHC(1)-126; Washington: U.S. Government Printing Office, March 1972).

³U.S. Bureau of the Census. <u>Census Tracts: Laredo, Texas</u>, (PHC(1)-107; Washington: U.S. Government Printing Office, March 1972).

Needs Assessment

Statistical data presented by the Governor's Committee on Public School Education (1969) indicate that 55% of the Spanish surname students in the State of Texas now drop out of school prior to graduation. In contrast, 29% of the Anglo students drop out of school before graduation. Statewide projections indicate that by 1974-75 the percentages of dropouts will be reduced to 50% for Spanish surname students and 24% for Anglo students.

Data for the seven counties in Region One reveals that in 1969-70 there were 16,558 children in grade one, 10,583 in grade nine, and 6,150 in grade twelve. Since the school population has been relatively stable within the region for the past decade, this would indicate that approximately 64% of the pupils graduate from junior high school and only 37% graduate from high school. addition, a 1966 elementary school survey of approximately 70% of the elementary school students within Region One indicated that 29% of the students were one year overage in grade and an additional 17% were two or more years overage in grade. Similarly, the study indicated that 33% of the students were one year behind grade level in reading skills and 14% were two or more years behind. According to experienced educators in the Region, the major academic cause of the low achievement levels and high dropouts rates of Spanish surname students are: (1) their initial lack of the English language skills upon which the school curriculum is based, (2) the compounding of this disadvantage as they progress through the textbook oriented classrooms of elementary school, and (3) their associated lack of understanding of academically related concepts corresponding

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⁴ Report of the Governor's Committee on Public School Education: The Challenge and the Change, Research Report, Volume I, (Austin, Texas, 1969), p.39.

⁵A. R. Ramirez, <u>Lower Rio Grande Valley Elementary School Survey</u>, unpublished report, (Edinburg, Texas: Region One Education Service Center, 1966).

to the low socioeconomic living conditions of their families. Consequently, These students need a school program which will capitalize on their knowledge of Spanish and at the same time assist them in learning English.

The Schools

The forty school districts served by Region One Education Service Center range from 17,500 ADA to 75 ADA. Only three districts (Brownsville, McAllen, and Laredo) have ADA of greater than 10,000. In contrast, sixteen districts have an average ADA of less than 1,000. A 1972 survey of the school districts within Region One indicated that 84% of the children had Spanish surnames. 7

A minimum foundation pre-school program was instituted by the State of Texas in 1970-71 for non-English speaking students and students between 5 years 5 months and 6 years of age and an income below \$3,000. This pre-school program will be extended to include all children 5 years of age and older by the 1977-78 school year. The implementation of this program has presented the school districts in Region One with serious staffing problems because few of the teachers are certified for kindergarten teaching.

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⁶Texas Education Agency, <u>Public School Directory</u>, (Austin: Texas Education Agency, 1971).

⁷Texas Education Agency, <u>Fall Survey</u>, 1971, unpublished report of statistical data, (Austin: Texas Education Agency, 1972).

II. SCOPE OF THE PROGRAM

The Language difficulties and low achievement levels of many Mexican-American students in Region One (as noted in the needs assessment) formed the basis for establishing the Region One Bilingual Project. This program, affour-year program for Mexican-American children with little or no knowledge of English, is designed to enroll students at the kindergarten level and carry them through third grade. The Region One Bilingual Project consists of four components:

- 1. <u>Spanish Reading</u>. This course is designed to teach first year (kindergarten) Spanish-speaking students to read in Spanish. Students continue to use the reading skills as part of the social education program in first and second grade.
- 2. <u>English As A Second Language</u>. This component consists of a two-year sequence of oral English instruction (kindergarten and first grade) designed specifically for non-English speaking children.
 - Transitional English Reading. This course is designed to use the skills developed by the students in the Oral English Program and the Spanish Reading Program to teach the students to read in English. When completed, it will consist of a two year sequential program. The first year of the English Reading Program was developed during 1970-72; the second year program is scheduled for development during the 1972-73 school year.
- 4. <u>Social Education</u>. This component will, when completed, consist of a three-year program designed to teach first, second, and third grade students concepts about themselves, the school, their family and culture, and local history. The first-year program was developed during

the 1970-71 school year; the second year program was developed during the 1971-72 school year. The third-year program is scheduled for development during the 1972-73 school year.

During 1971-72, the Region One Bilingual Project enrolled 1,301 students in kindergarten, first, and second grade from five public schools. All participating schools were from communities within 20 miles of the Region One Education Service Center. All students in the project were selected by the schools because they had little or no knowledge of the English language.

Program Objectives for 1971-72

- 1. To field test the first-year Spanish Reading Program.
- 2. To field test the English As A Second Language Level I and Level II Programs.
- 3. To field test the first-year Transitional English Reading Program.
- 4. To field test the first-year Social Education Program and to develop and pilot test the second-year Social Education Program.

Historical Background of the Region One Bilingual Project

The components of the Region One Bilingual Project are based on materials previously developed by other projects: However, substantial modifications of the original materials have been made in order to construct a unified program.

The Spanish Reading Program was adapted using materials and personnel from the Milleret Kindergarten in Mexico City. Since the 1969-70 school year was the first year of operation for this program within the Region One Bilingual Project, the major emphasis was materials development and limited pilot testing. During the 1970-71 school year, materials were revised and field tested in 35 kindergarten and first grade classrooms. A field test was conducted in 18 kindergarten and 12 first grade classrooms in 1971-72.

The materials used in the English As A Second Language (ESL) Program are an expanded version of the H-200 sequential language pattern materials developed at UCLA from 1965-68 under funding from the United States Office of Education. The ESL component was in its fourth year of operation during 1970-71 (this component was operated as a ESEA Title. III project during its first year of operation). Level I and Level II materials were field-tested during 1969-70. Field testing of both the level I and Level II Programs has been continued during the 1971-72 school year.

The materials comprising the first year of the Transitional English Reading Program have been developed primarily by the Bilingual Project staff using English vocabulary presented in the ESL Level I Program. The program was in the planning stage during 1969-70. The materials were developed and pilot tested in 20 first-grade and second-grade classrooms during the second semester of 1970-71. The program was field tested in 15 first grade and 9 second grade classrooms during 1971-72.

The Social Education Program is a modified sequence of English language materials developed by the Southwest Educational Development Laboratory and Spanish language materials developed by the Bilingual Project staff. This component was in the planning stage during 1969-70. Materials development and pilot testing of the Social Education Level I Program were conducted in 20 first-grade and second-grade classrooms during 1970-71. During 1971-72, the Level I program was field tested in 13 first grade classrooms. PAt the same time, the Level II program was written and pilot tested in two first grade and nine second grade classrooms.

<u>Personnel</u>

Personnel participating in the Region One Bilingual Project included 15 staff members and 42 classroom teachers.

Classroom Teachers. Forty-two kindergarten, first, and second grade teachers in five public schools participated in the project during 1971-72. Thirty-seven of the teachers had a bachelors degree, four had a bachelors degree plus fifteen hours graduate work, and one had a masters degree. Certification of the teachers by the State of Texas was as follows: 18 teachers held permanent certificates, 20 held provisional certificates, and 4 held emergency certificates. Each of the four teachers with emergency certification (all kindergarten teachers) was certified as an elementary teacher, but was not-certified as a kindergarten teacher.

Statistics for the 18 kindergarten teachers indicate that they had an average of 4.6 years total teaching experience. In contrast, their average teaching experience in kindergarten was 2.0 years. The 15 first grade teachers had an average of 10.2 years total teaching experience and an average of 8.2 years experience in first grade. The nine second grade teachers had an average of 10.4 years total teaching experience. However, their average teaching experience in second grade was 4.6 years.

Each teacher was asked to rate her ability to communicate in Spanish.

Twenty-four of the teachers indicated that they were fluent in speaking, reading, and writing Spanish. Eight teachers stated that they were fluent in speaking but not fluent in reading or writing. Eight teachers indicated that they could "get along," but were not fluent in speaking, reading or writing.

Only two teachers were unable to communicate at all in Spanish.

Administrative Staff. The staff for the Region One Bilingual Project during 1971-72 consisted of nine full-time and six part-time persons. The full-time staff members included the Project Director, Project Evaluator, four Primary Supervisor/Consultants, and the Artist/Illustrator. A list of the project personnel and their professional qualifications is appended (Appendix A).

Organizational Details

The Region One Bilingual Project has been funded for 5 years. The present report is an evaluation of the third year of the project.

Physical Arrangements. The Region One Bilingual Project introduced the Bilingual Program into five public elementary schools within a 20 mile radius of the Region One Education Service Center. Each of the schools agreed to allow the project staff to train teachers in the use of the materials, visit each teacher once each week, and conduct a testing program to evaluate student progress. Site aides were hired by the Project Director and housed at each of the five elementary schools.

Inservice Training. The Bilingual Project staff conducted a 2-day inservice program for the teachers participating in the project during August 1971. In addition, supervisors from the Bilingual Project staff observed each teacher each week and answered questions about the materials. The supervisors also conducted demonstrations of recommended techniques for using the materials in each classroom while the teacher observed.

<u>Activities</u>

Each of the Bilingual Project components consisted of several activities. In most instances, the classes were divided into small groups and two or more activities were conducted simultaneously. Each of the Bilingual Project components and the recommended activities are described below.

Spanish Reading. The Spanish Reading Program was planned as a 40-minute activity and was designed for both total group and small group work. The basic lesson was introduced to the whole class by the teacher. Then the class was divided into two or three groups (eight students per group) and engaged in the following activities:

Group I
(Teacher)

Introduce Vocabulary
Introduce Sound-Symbol
Alphabet Trays and Workbooks
Form Syllables, Words, and
Sentences

Group II (Aide)

Form Syllables with Alphabet Travs Songs and Games Fingerplays Filmstrips Folk Tales Group III
(Self-Directed Activities)

Games (Bingo, Dice)
Mystery Box (Letters)
Vocabulary Activities
with Peer-Tutor

A list of key materials and equipment used in the Spanish Reading Program is presented in Appendix B.

English As A Second Language. The English As A Second Language component of the Bilingual Project consisted of a two-year Oral Language Program. Since each program had unique activities and utilized different types of materials, the descriptions of the two programs are presented under separate headings.

ESL Level I and Level II Programs. The ESL Level I Oral Language Program consisted of 128 oral language lessons and supplementary materials. The Level I Program was designed to present 3 hours of ESL activities per day. The basic activities for the ESL Level I Program are:

| Activity | Suggested Time |
|---|--|
| *Basic Language Lessons / *Aural-Oral Language Cards *Filmstrips-Recordings *Song Recordings Sharing Time | 30 minutes 30 minutes 15 minutes 15 minutes 30 minutes |
| Cooking *Games .*Seatwork | Every 2 weeks 20 minutes |
| *Free Play | 20 minutes 20 minutes |

*Small Group Activities

A list of the materials and equipment used in the ESL Level I Oral Language Program is presented in Appendix B.

The ESL-Level II Oral Language Program consisted of 115 oral language lessons and supplementary materials. The Level II Program was designed to present

two hours of ESL activities per day. The basic activities for the ESL Level II Program are:

| <u>Activity</u> | Suggested Tine |
|-------------------|----------------|
| *Basic Lesson | 30 minutes |
| Sharing Time | 30 minutes |
| *Creative Writing | 30 minutes |
| *Games . | 15 minutes |
| *Seatwork | 15 minutes |

*Small Group Activities

A list of the materials and equipment used in the ESL Level II Oral Language Program is shown in Appendix B.

Transitional English Reading. The Transitional English Reading Program consisted of 30 minutes of English reading activities each day. The class was divided into three groups of seven to eight students. Each group spent 10 minutes in each of the following three activities: (1) reading booklets and alphabet trays, (2) phonics (flash cards), and (3) games or puzzles. All materials used in the program were developed by the Bilingual Project staff. A list of the materials and equipment used in the program is presented in Appendix B.

Social Education. The Social Education component of the Bilingual Project consisted of a two-year program (Level I and Level II). Both the Level I and Level II programs were scheduled for 30 minutes each day and consisted of large group and small group activities. The large group activities included discussion, question and answer, role-playing, and story telling. Small group activities were tape recording, drawing, seatwork, cut and paste, and games.

The Social Education Level I program consisted of a set of eight units and supplementary materials. Three of the units were taught in Spanish and five were taught in English. The Spanish language units were developed by the Bilingual Project and the English units were developed by the Southwest Educational Development Laboratory in Austin, Texas.

The Social Education Level II program consisted of eight units and was taught in Spanish. The units were developed by the Bilingual Project. A list of the materials and equipment used in the Social Education Level I and Level II programs is shown in Appendix B.

Community Involvement

The Region One Bilingual Project community involvement program included avariety of activities designed to inform parents, the general community, local university students, and other professional persons of the project's purposes and activities.

Several techniques were used to inform parents about the project and inlist their support and aid. Mothers in each of the communities were selected
to serve as classroom aides in classrooms where aides were not provided by the
school. These Mother Aides were scheduled to serve for a period of 12 weeks
(one-third of the school year) and then were to be replaced by another Mother
Aide. However, only two of the schools changed Mother Aides every 12 weeks.
The other schools preferred to keep the same Mother Aides for a full semester
because (1) it was time-consuming to train three different aides during the
school year and (2) it was difficult to find qualified mothers.

The schools in the project were encouraged to plan activities to acquaint parents with the purposes and activities of the four programs in the Bilingual Project. Formal meetings between the project staff and parents were arranged in two of the schools. In a third school, parents were invited to observe their children and become familiar with the Bilingual Program. Another school held an open house to inform the parents about the program.

Parent committees, formed during 1970-71 to provide input into curriculum development activities, were not organized for the 1971-72 school year. Since



the needed inputs had already been provided by previous committees, the time and effort required to organize parent committees was not commensurate with the assistance such committees could provide to the project.

A random sample of ninety-four parents of children in the project were interviewed in February 1972 by a university student hired by the Bilingual Project. Results of the parent interviews indicated that 95% (89 parents) approved of the project. When asked about the advisability of teaching children to read in Spanish, 95% replied that they were in favor of it, 1% (1 parent) was afraid it would interfere with her child learning English, and 4% (4 parents) had no comment. When the parents were asked their opinoin of the methods used to teach oral English, 95% favored it, 4% were not in favor of it, and 1% had no opinion.

Other community involvement activities included television programs and presentations to professional groups. Two 30-minute television programs were prepared and shown on a local television station. The shows included explanations of the philosophy and programs in the Bilingual Project and live classroom demonstrations of program activities. A 15-minute summary of the project was also presented on a state-wide program sponsored by Senator John Tower. Additional dissemination activities included forty-six presentations and workshops to other bilingual projects, university groups, public school groups, and business and civic groups.

III. EVALUATION OF THE PROJECT

The Region One Bilingual Project consists of four curriculum components:

(1) Spanish Reading, (2) English As A Second Language, (3) Transitional English Reading, and (4) Social Education. The 19 1-72 Evaluation Design for the Bilingual Project listed 124 product and process objectives. Ninety-three of the objectives dealt with the four curriculum components listed above. A report of the status of all objectives has already been submitted as a part of the 1972-73 Continuation Proposal. Consequently, only product objectives which pertain directly to student achievement will be evaluated in the present report. A summary of the present status of the remaining objectives is attached as Appendix C.

A. SPANISH READING

Objectives

1. A set of eight reading booklets with supporting materials designed to teach kindergarter and first grade native Spanish-speaking students to read in Spanish was developed during 1969-70 and revised in 1970-71. The project staff will conduct a field test of this Spanish Reading Program. The field test will include a random sample of at least 50 kindergarten students and 50 first grade students who are participating in the project (no control group will be used since it is assumed that children who have not received instruction will not be able to read in Spanish). The evaluation instrument will be a Spanish Reading Test developed by the Bilingual Project staff during the 1970-71 school year. At least 80% of the students at each grade level will score 80% or above on the Spanish Reading Test (composite score).

2. An interim testing program based on the revised Spanish Reading Program will be established in each kindergarten and first grade classroom participating in the 1971-72 field test. The interim tests used during 1970-71 will be revised on the basis of (1) the advice of a consultant who evaluated the Spanish Reading materials in March 1971, and (2) the results of the 1970-71 interim testing program. Interim tests will be given by each classroom teacher upon completion of each of the eight reading booklets. A criterion level of 80% of the students in each classroom scoring 80% or better on each interim test has been selected.

The Students

Thirty-four classrooms with a total of approximately 850 students participated in the Spanish Reading Program. Eighteen of the classrooms were kindergarten, twelve were first grade, and four were second grade. The kindergarten students were selected by the schools to participate in the Spanish Reading Program on the basis of two criteria: (1) they could speak little or no English, and (2) they could speak Spanish. The students participating in the Spanish Reading Program were not representative of all kindergarten and first grade students in the schools. They were students who in the judgment of the professional staff of the school, would encounter difficulty with the normal school program because of their limited facility with the English language. The first grade students were selected for the program because they had been in Spanish Reading the previous year but had not completed the program. The only exceptions were approximately 60 first grade students, recommended by the participating schools, who started at the beginning of the Spanish Reading Program. All the students in second grade had been in the Spanish Reading Program as first graders but had not completed the total program.

Since few students outside the Spanish-Reading Program could be expected to

learn to read in Spanish, a control group could not be used. All students in the Spanish Reading Program participated in the interim festing program and the end-of-year testing.

Measures

A series of seven interim tests developed by the Bilingual Project staff were used to measure student progress in the Spanish Reading Program. Six of the interim tests were developed in 1970-71 and revised prior to the 1971-72 field test. The seventh test was developed during 1971-72.

The lirst interim test, measuring auditory and visual recognition of letters and syllables, was used with hand card-punch machines (QRS Machines) and pre-punched computer cards. This test was conducted by a Bilingual Project staff member. Tests two through seven were designed to test spelling, ability to read words, and ability to read sentences. These tests were printed and required the student to respond either by marking an "X" on the correct answer or to spell words (spelling test only). The tests were administered by the classroom teachers.

The end-of-course test administered to the students during May 1972 was a criterion test constructed by the Bilingual Project staff during 1970-71 and revised for the 1971-72 field test. It was necessary to develop a local test because no standardized Spanish Reading Test was available. The test was administered to the class as a group by the classroom teacher. The test consisted of five subtests and a total score. The subtests were spelling, word reading I, word reading II, sentence comprehension and paragraph comprehension.

Results Of The Interim Testing Program

All of the kindergarten and first grade classrooms in the project participated in the interim testing program. The second grade classrooms also participated but, because of the small number of students, their test results have not been included in this report. Both the kindergarten and first grade classrooms grouped their students for Spanish reading instruction. As a result, interim tests were given to each group of students within each classroom as they completed the reading booklets. Records indicate that eleven of the eighteen kindergarten classrooms and all twelve first grade classrooms had at least one group of students who completed at least seven of the eight Spanish Reading booklets (booklet 8 consisted of review activities and special rules. It was not considered essential for completing the program).

A criterion level of 80% of the students in each classroom attaining 80% correct on each interim test was arbitrarily selected as the goal for the interim testing program. However, after reviewing results of previous year's testing and the first two interim tests, it was apparent that the criterion level should be revised. Consequently, the criterion level has been set as 75% of the students attaining 75% correct on each interim test.

A summary of the percentage of kindergarten students in each classroom who scored 75% (or higher) for interim tests 1 through 7 is presented in Table I. The results are presented graphically in Table II. The tables indicate that 15 of the 17 kindergarten classrooms achieved the criterion on Test #1 (one classroom did not report). Similarly, 16 of 18 classrooms reached the criterion on Tests #2 and 3 while 13 of 16 classrooms attained it on Test #4.

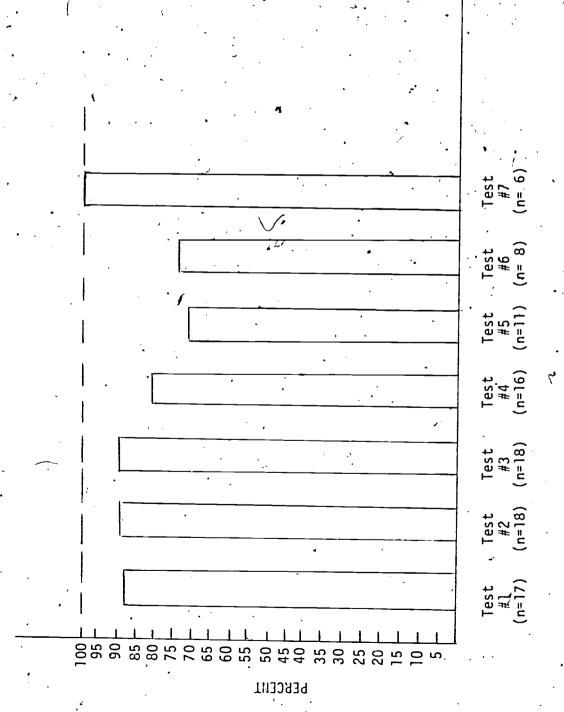
TABLE I

SPANISH READING - KINDERGARTEN INTERIM TEST RESULTS (Percentage of Students Scoring 75% Correct)

| Test #7 | 7 100% | No Test | 2 - 100% | No Test | %001 2 | . No Test | No Test | No Test | No Test | No Test | No Test | , 7 86% | Nó Test | 2 86% | No Test | No Test | |
|-------------------|-----------|--------------|----------|----------|--------|-----------|-----------|----------------|---------|------------|---------|---------|---------|-----------------|---------|----------|-----|
| Test #6 | | 7 71% | .No Test | 3 100% | %001 / | No Test | No Test | No Test | 9 67% | No Test | No Test | 18 94% | No Test | 7001 9 . | No Test | No Test | |
| Test #5 | 17 · 100% | 18 61% | 13 100% | No Test | 8 100% | 8 . 100% | , No Test | No Test | 18 61% | No Test | 5 100% | 24 67% | 12 92% | . 22 95% | No Test | No Test | |
| ## 2 % | 100% | 82% | , %001 | 100% | 1,00% | 75% | 88% | Test | 89% | 93% | %68 | . 95% | 74% | . %08 | 88% | 72% | |
| Test | 21 | 28 | 19 | <u>د</u> | . 01 | 24 | œ | N _O | .18 | . 15 | 19 | 21 | . 23 | 52 | ∞ | • 29 | |
| £ 33 | 100% | 71% | · %96 | 100% | 100% | %19 | 81% | 100% | 81% | 94% | 95,8 | 94% | 86% | 81% | 3001 | 71% | |
| Test | 23 | 28 | . 24 | 18 | 10 | 24 | 16 | 12 | 16 | 16 | 19 | 31. | 22 | 43 | = | 48 | |
| ± 55 ± 55 | 100% | %26 | 95% | 100% | 86% | 75% | 52% | 80% | 74% | 100% | 95% | %06 | %00١ | 76% | 94% | 20°5 | . • |
| Test | 23 | 30 | 20 | 24 | 59 | 24 | ر2, | 52 | 27 | 14 | 21 | 59 | 26 | 34 | 17 | 89 | |
| ₩ 5° . | %06 | %00 t | 100% | 100% | 3001 | 100% | 76% | Test | 79% | 100% | 100% | 71% | . 50% | * 88% | 85% | 100% | |
| Test | 31 | 24 | 22 | 24 | 21 | 23 | 21 | No. | 24 | | | | 9 | 52 | 50 | <u>4</u> | |
| Teacher | - | . 2 | т | 4 | . 22 | 9 | 7 | 8 | 6 | 2 2 | 11 | 12. | . 13 | 14-15 | . 16 | . 17-18 | |

TABLE II

SPANISH READING - KINDERGARTEN INTERIM TEST RESULTS Percentage of Classrooms Attaining Criterion*



*CRITERION LEVEL WAS DESIGNATED AS 75% OF THE STUDENTS IN THE CLASSROOM SCORING 75% OR ABOVE ON THE INTERIM TEST

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Eight of the 11 classrooms that reported on Test #5 achieved the criterion while the corresponding figures were 6 of 8 classrooms for Test #6 and 6 of 6 classrooms for Test #7. Table II indicates that fewer classrooms (and fewer students within each classroom) reported interim test data for Tests 5-7. The primary reasons were (1) several classrooms had no student groups that completed reading booklets 5-8, and (2) the end-of-school activities received priority over the interim-tests.

The first grade classrooms in the project were not given the first interim test because most of the students had completed part of the Spanish Reading Program during kindergarten. (The only exceptions were approximately 60 first grade students who had not been in Spanish Reading in kindergarten but were recommended for inclusion by the schools). All classrooms were asked to administer interim Test #2 through 7. However, several classrooms skipped Test #3 because their students were ready to begin reading booklet 4 at the start of school. In addition, four classrooms did not administer interim Test #7 because of time constraints imposed by end-of-year testing committments and other end-of-school activities.

A summary of the percentage of first grade students in each classroom who scored 75% or higher for interim Tests 2 through 7 is presented in Table III. A graphic display of the percentage of classrooms achieving the criterion is presented in Table IV. The tables indicate that 8 of 10 classrooms (80%) achieved the criterion of Test #2 while 4 of 7 classrooms (57%) attained it on Test #3. Tests #4, 5, and 6 were administered by all first grade classrooms (with the exception of one classroom on Test #4). The percentage of classrooms attaining the specified criterion level on these tests were 82% (Test #4), 83% (Test #5) and 67% (Test #6). Finally, Test #7 was administered in 8 classrooms and yielded a percentage of 63% attaining the criterion.

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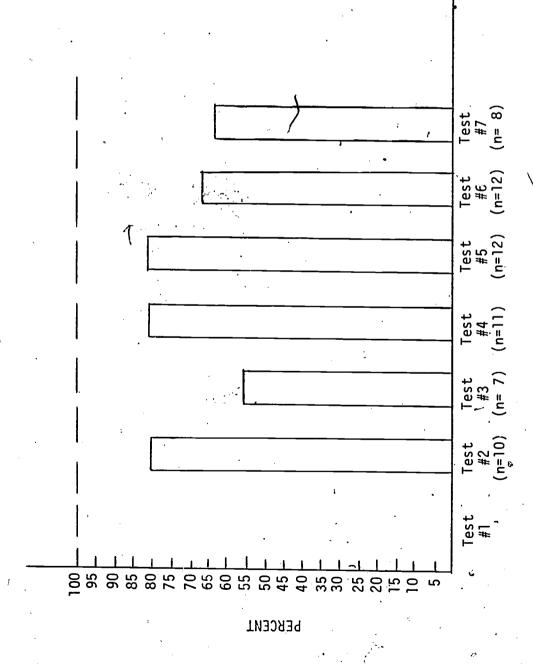
TABLE III

SRANISH READING - FIRST GRADE INTERIM TEST RESULTS (Percentage of Students Scoring 75% Correct)

| Test #7 | No Test | 946 | 68% | 89% | Vo Test | %68 e | to Test | %26 (| £29 6 | %09 9 | 85% | lo Test |
|-----------|---------|-------------|---------------------------------------|----------|---------|-------|---------|----------|---------|----------|-------------|----------|
| | | | | | | • | | | | - | | |
| t #6 | 73% | 79% | 64% | 82% | 84% | 33% | 100% | %96 | 56% | , 80% | 79% | 94% |
| Test | 30 | 28 | 25 | . 22 | . 25 | 12 | 1 | . 28 | 25 | 2 | 14 | 18 |
| # 3.6 | • | | | | | | | | | | | |
| Test | | | | | | | • | : | • | • | `, | |
| . Test #4 | Test | 65 % | 81% | 88. % | 85% | 55% | 93% | 86% | 78% | 100% | %98° | 100% |
| Tes | NO | 3] | 27 | 52 | 27 | = | 30 | 27 | 23 | . 19 | 14 | |
| Test #3 | o Test |) Test | 70% | %96 |) Test | . %25 | 73% | . Test |) Test | , 95% | 87% | , 001 |
| T L | ž | ž | | | | | , | <u>;</u> | | | | |
| t #2 | Test | Test | 77% | 93% | 70% | 75% | 87% | 43% | 86% | .79% | 63 % | 86% |
| Test | N O | , No | 26 | 27 | 20 | 12 | 30 | 30 | 19 | Ξ | 15 | ^ |
| Test #1 | | . Not | · · · · · · · · · · · · · · · · · · · | o lyen. | • | | | | | | | |
| Teacher | - | 2 | ю | 4 | | 9 | 7 | | ° 25 | 10 | = | 12 |

TABLE IV

SPANISH READING - FIRST GRADE INTERIM TEST RESULTS Percentage of Classrooms Attaining Criterion



The results of the kindergarten and first grade interim testing programs illustrated in Table II and Table IV indicate that the objective of each class-room achieving a specified criterion level of performance on each interim test was not attained. However, the statistics for classrooms is somewhat misleading because some classrooms exceeded the criterion by a large margin while others failed by a narrow margin. In addition, some classrooms had more students than others, and the total class percentages obscured these numerical differences. For these reasons, total group statistics have also been calculated for both the kindergarten and first grade students.

A set of summary statistics for all kindergarten students is presented graphically in Table V. These statistics reveal that over 75% of all the kindergarten students participating in the project scored at or above 75% correct on each of the seven interim tests. The table also shows that the mean percent correct (i.e. average score) was above 75% for every interim test.

Summary statistics for the total first grade group is displayed in Table VI. These statistics indicate that, with one exception (Test #6), 75% or more of all the first grade students participating in the project scored above the criterion on the interim tests. Similarly, the mean percentage correct (average score) for the first grade students was 75% or higher for every interim test.

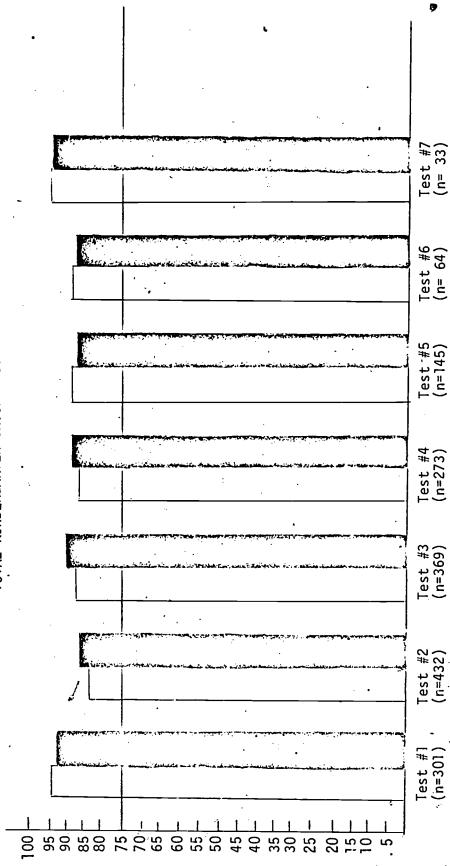
These total group statistics presented in Tables V and VI reveal that the students, when considered as a group rather than by classroom, achieved the specified criterion levels.

Results of the End-of-Program Test

Fifteen kindergarten and twelve first grade classrooms with a total of approximately 720 students participated in the final Spanish Reading Test.

Although the objective for the end-of-program test limited the number of students taking the test to 50 kindergarten and 50 first graders, a total of

TABLE V SPANISH READING - INTERIM TEST RESULTS TOTAL KINDERGARTEN GROUP - SUMMARY STATISTICS



РЕВСЕИТ

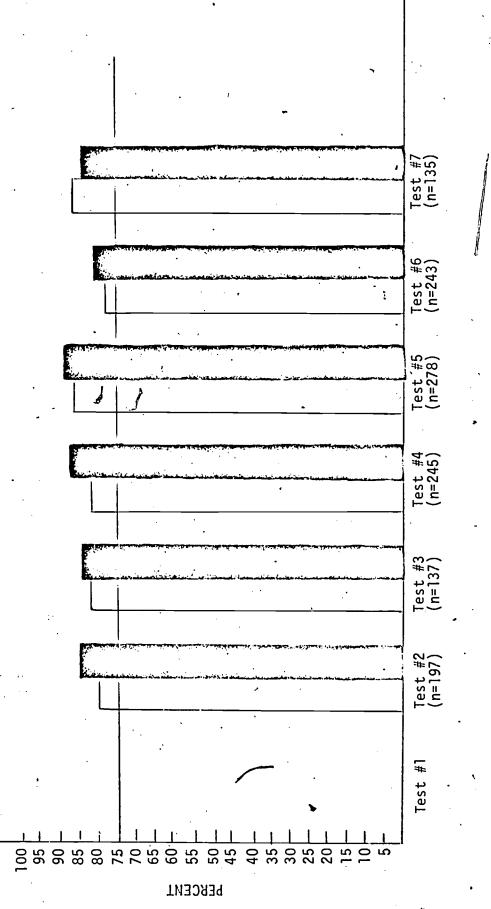
PERCENT OF TOTAL KINDERGARTEN GROUP SCORING ABOVE 75% CORRECT

"T-MEAN PERCENT CORRECT FOR THE TOTAL KINDERGARTEN GROUP

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TABLE VI SPANISH READING - INTERIM TEST RESULTS TOTAL FIRST GRADE GROUP - SUMMARY STATISTICS



PERCENT OF TOTAL FIRST GRADE GROUP SCORING ABOVE 75% CORRECT

MEAN PERCENT CORRECT FOR THE TOTAL FIRST GRADE GROUP

599 students actually completed the final Spanish Reading Test (End-of-Program Test). This number represents all students who had completed the prerequisite number of reading booklets. The primary reasons for the discrepancy between the number of students in the classes and the number that completed the test were (1) early student withdrawal from school, and (2) students who had not completed reading booklet 4 were not given the test.

The End-of-Program Test for the Spanish Reading Program consisted of five subtests and a composite score. Average percent correct on the five subtests and the composite score for kindergarten and first grade students are presented in Table VII. The table reveals that the students who completed the fewest reading booklets made the lowest scores, both on the subtests and on the composite score. Since the test was designed for students who had completed at least 7 of the 8 reading booklets, they were expected to have the highest scores. These students did score higher on all subtests except the spelling subtest at the kindergarten level.

Table VII indicates that the students had the least difficulty with the first subtest (Words I). Since this subtest contained only words with letters and vowel-consonant patterns similar to those presented in booklets 1-5, scores were expected to be high. Subtest 2 (Words II) contained words whose spelling patterns appeared in reading booklets 5-7. Students who had not completed these booklets were expected to have lower scores than students who had. The Table also indicates that students who had completed at least booklet 5 had similar scores on the third subtest (Words III). This subtest required the student to listen to a word spoken by the teacher then select the word from four choices. The subtests on sentence comprehension and paragraph comprehension and the composite (total) score for the test all had score patterns which coincided with the number of reading booklets completed by the students. The only

TABLE VII

SPANISH READING END-OF-PROGRAM TEST Kindergarten and First Grade Students Average Percent Conrect

| TOTAL | 47% | . %89 | 79% | %68 ************************************ | 58% | %92 | 79% | 87% |
|---------------------------------|---------------|----------|-------------|---|----------------|-------|-------|-----------|
| PARAGRAPH COMPREHENSION | 14% | . 22% | 53% | 71% | 36% | 41% | 47% | * * %89 · |
| SENTENCE COMPREHENSION | 30% | 48% | % 99 | %68 | . 56% | . 73% | . %29 | 82% |
| WORDS III | . 27% | . %28 | %98 | 84% | 72% | 92% | 92% | 95% |
| MORDS II | 42% | . 76% | 83% | % 9 6 | . 55% | %62 | 84% | , %06 |
| WORDS | . %69 | , %06 | . 92% | 98% | , 70% | 85% | 93% | . 93% |
| NUMBER | | 69 | . 22 | 66 | . = | 15 | . 23 | 237 |
| READING BOOKLET COMPLETED | 4 | | ۰ ، ن | 7-8 | 4 | r. | 9 | 7-8 |
| GRADE LEVEL | , ×, . | ~ ~ | · × | ,⊭ . | r Ist | lst | · lst | lst |

TABLE VIII

SPANISH READING END-OF-PROGRAM TEST Percent of Students Scoring Above 80% (Composite Score)

| | GRADE LEVEL | READING BOOKLET COMPLETED | NUMBER TESTED | NUMBER ABOVE 80% | PERCENT ABOVE 80% |
|----------|---------------|---------------------------------|------------------|---------------------|----------------------|
| | Kindergarten | 4 | . 09 | o | 12% |
| | Kindergarten | | 69 | 18 | , 26% |
| | Kindergarten | . 9 | 55 | 32 | 28% |
| • | Kindergarten | 7-8 | 66 | 98 . | 87% |
| | | | | | |
| | First Grade | 4 | 11 | က | 27% |
| | First Grade | ហ | 15 | . 6 | . % <u>0</u> 9 |
| 32 | First Grade . | 9 | 23 | 14 | |
|) | First Grade | 7-8 | 237 | . 361. | 82% |

exception was sentence comprehension for first grade students in booklet 5. However, since only 15 students were tested at this level, the scores should not be considered representative of that level of achievement.

The objective for the Spanish Reading End-of-Program Test was for 80% of the students to attain a score of at least 80% (Composite Score) on the test. Table VIII indicates the degree to which this objective was achieved. All of the student groups who completed fewer than 7 of the reading booklets fell below the criterion level. In contrast both the kindergarten and first grade students who completed booklets 7 or 8 achieved percentages higher than 80%. These results are compatable with the objectives of the Spanish Reading Program.

ENGLISH ÀS A SECOND LANGUAGE

The English as a Second Language (ESL) Program of the Region One Bilingual Project consists of a two-year sequence of oral English lessons. For the purpose of this report, the results of the interim testing program and the end-of-year tests will be considered separately for the first year (Level I) and second year (Level II) ESL Program.

Objectives for ESL Level I and Level II

- 1. The project staff developed an ESL Level I interim testing program consisting of seven Bingo Interim Tests during 1970-71. Each teacher in the first (level I) ESL program will administer a Bingo Interim Test to her students after the completion of each 15 ESL lessons. A class average of 75% correct has been selected as the criterion level for the Bingo Interim Tests.
- 2. The project staff developed an ESL level II interim testing program consisting of seven Bingo Interim Tests during 1970-71. Each teacher in the second year (level II) ESL Program will administer a Bingo Interim Test to her students after the completion of each 15 ESL lessons. A class average of 75% correct has been selected as the criterion level for the Bingo Interim Tests.
- 3. The performance of the students who have completed the ESL level I Program will be compared to that of a control group using both pre and post instruction assessment. A random sample of students in the level I program and the control group will be given a structured interview in lieu of a pretest. At the end of the school year the two groups will be compared on a post test developed by the Bilingual Project staff. The test results should demonstrate that there are no significant differences between the two

groups of students at the beginning of the year, but that the experimental group will have significantly higher scores on the post test.

4. The performance of the students who have completed the ESL level II Program will be compared to that of a control group using both pre and post instruction assessment. A random sample of students from the ESL level II program and the control group will be given a pretest and a post test using an oral language test developed by the Bilingual Project staff. The test results should demonstrate that the two groups of students are not significantly different on the pretest but that the experimental group has significantly higher scores on the post test.

The Students

Thirty-two classrooms with a total enrollment of approximately 950 students participated in either the ESL Level I or ESL Level II program. Eighteen kindergarten classrooms containing about 540 students were in the ESL level I program. Fourteen first grade classrooms containing approximately 410 students were part of the ESL Level II program. Two second grade classrooms participated in the ESL Level II program but, because of the small number of students, were not included in the statistical analyses contained in this report.

The kindergarten students selected to participate in the ESL level I program were chosen by the school personnel on the basis of their limited oral English facility. The students in the ESL level II program had completed the ESL level I program the previous year.

Measures

A series of seven interim tests were developed for each level of the ESL program by the Bilingual Project staff. These tests were designed as group tests to monitor student progress throughout the school year. Each of the tests consisted

of eight items covering language patterns presented in the preceding 15 language lessons. The test was administered to a group of approximately eight students at one time. Consequently, all scoring was done on a group basis and no individual scores were calculated. Teachers were encouraged to select students at random for testing and to administer a test to only one group. These restrictions were necessary in order to avoid using excessive amounts of class time for testing.

Achievement tests covering the various language patterns presented in the lessons were developed for each level of the ESL Program by the Bilingual Project Staff. The tests were developed during 1970-71 and revised on the basis of the results obtained from the 1970-71 evaluation of the ESL Programs. The tests were designed to test only English language structures because the development of sentence structure is the primary objective of both the ESL Level I and Level II Programs. The two achievement tests, containing 40 and 44 items respectively, were designed according to the same basic format and were administered orally via telephone by a member of the Bilingual Project staff. The students responses to the test items were recorded on tape. The tapes were then transcribed and scored by a Bilingual Project staff member.

Results of the Interim Testing Program

The interim testing program for both the ESL Level I and Level II programs consisted of seven interim tests. The tests were designed to be administered by the classroom teachers after every 15 language lessons. The results of the interim testing program for each level of the ESL Program are presented below.

ESL Level I Interim Test Results

The interim tests for the ESL Level I program were administered to groups of 7-8 students and yielded only group scores. Since individual scores were not available, a class average of a 75% correct was selected as the criterion level for

each interim test.

Data presented in Table IX shows the number of kindergarten classrooms in which each interim test was administered and the number that attained the 75% criterion level. All classrooms achieved the criterion on four of the interim tests (Tests 3, 4, 5, and 7) while 16 of 17 classrooms reached it on Test 1. Only on interim tests 2 and 6 did more than one classroom fail to attain the criterion. However, on test 6, all four classrooms which failed to meet the criterion scored just below the designated level. Consequently, for 6 of the 7 interim tests, all classrooms were either above the criterion or clustered about it.

The average achievement level on the ESL level I interim tests is summarized. in Table X. The average percent correct for all students ranges from a low of 81% (Test 6) to a high of 94% (Test 7). However, averages for the majority of the tests tend to fall between 85% and 90%.

ESL Level II Interim Test Results

The interim tests for the ESL Level II Program were based on the same format as those for the Level I tests and yielded only group scores. As a result, all data from these tests were in terms of percentage correct by classroom. A class average of 75% correct in each classroom was selected as the criterion level for each interim test.

Table XI shows the number of classrooms in which each interim test was administered and the number that attained the 75% criterion level. The data indicates that over 90% of the classrooms attained the criterion on three interim tests while approximately 70% reached it on the four remaining tests. An analysis of these tests indicated that two classrooms had consistently low test scores throughout the school year. These teachers had not devoted the recommended amount of time to ESL activities and had omitted portions of the supplementary (reinforcing) activities.

TABLE IX

ESL LEVEL I INTERIM TEST RESULTS Number of Classrooms Attaining 75% Criterion Level

| INTERIM TEST | TOTAL CLASSROOMS | TOTAL REPORTING | NUMBER ATTAINING 75% CRITERION | PERCENT ATTAINING 75% CRITERION |
|-----------------|------------------|-----------------|--------------------------------------|---------------------------------------|
| Test 1 | 18 6 | 17 | 16 | 94% |
| ≃Test 2 | . 18 | . 14 | 11 . | 79% |
| Test 3 | 18 | 17 | 17 | 100% |
| Test 4 | \$. 18. | 18 | 18 | 100% |
| Test 5 | 18 | 16 | 16 | 100% |
| Test 6 | 18 | - 16 | 12 | 75% |
| Test 7 | 18 | 9 | 9 | 100% |

TABLE X

ESL LEVEL I INTERIM TEST RESULTS

Average Percent Correct

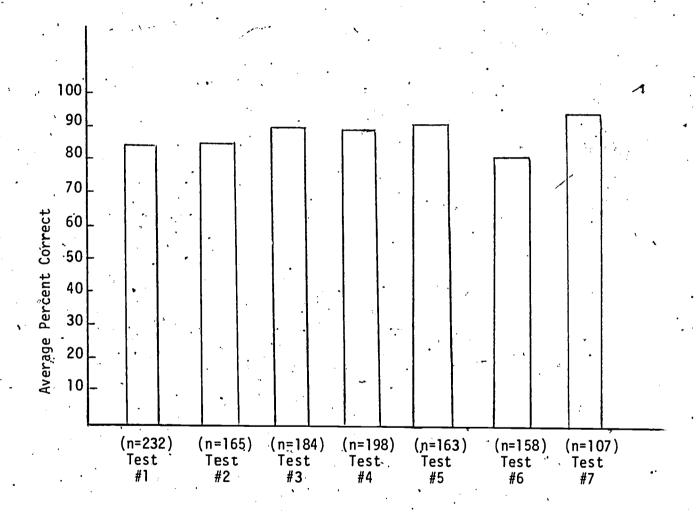


TABLE XI

ESL LEVEL II INTERIM TEST RESULTS
Number of Classrooms Attaining 75% Criterion Level

| INTERIM TEST | TOTAL CLASSROOMS | TOTAL REPORTING | NUMBER ATTAINING 75% CRITERION | PERCENT ATTAINING 75% CRITERION |
|-----------------|---------------------|--------------------|--------------------------------------|---------------------------------------|
| Test 1 | 14 | 14 | 10 | 71% |
| Test 2 | 14 | . 14 | 10 | 71% |
| Test 3 | 14 | 12 | 11 | 92% |
| Test 4 | 14 🦸 , | 13 | . 10 | 77% |
| Test 5 | 14 | 13 | 12 | 92% |
| Test 6 | 14 | 11 | 8 | 73% |
| Test 7 | 14 | 8 | 8 | 100% |

A summary of the average percent correct on each of the ESL Level II interim tests is presented in Table XII. The average percent correct for all students completing the Level II interim tests ranges from a high of 94% (Test # 7) to a low of 83%. Averages for the remaining five tests fall between 85% and 90%.

Results of the End-of-Year Tests

Achievement tests covering all sentence patterns presented in the ESL lessons at each level of the ESL program were developed by the Bilingual Project staff during 1970-71 and revised on the basis of 1970-71 test results. These tests were administered to a random sample of students in the corresponding level of the ESL program and to a comparable control group. A description of the test procedures and the results of the analyses are presented below.

ESL Level I End-of-Year Test Results

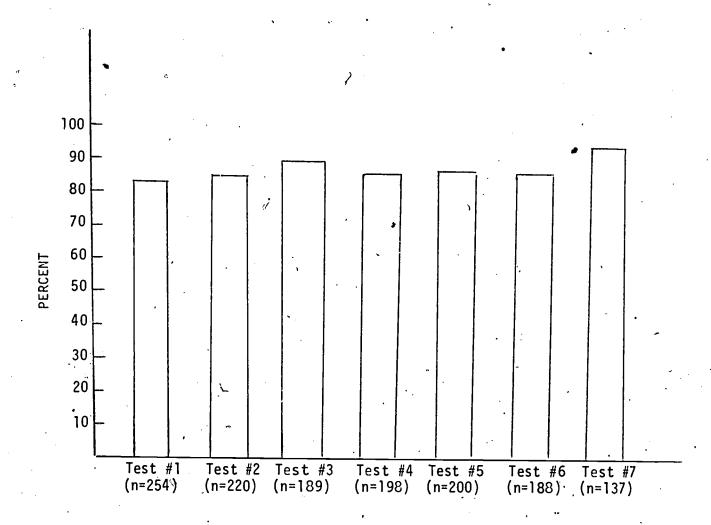
All eighteen kindergarten classrooms in the Bilingual Project participated in the ESL Level I end-of-year test. Six students were selected at random from each classroom at the beginning of the school year. A total of 108 students were selected in September 1971 and 95 were still in school in May 1972. These 95 students constituted the experimental group for the ESL Level I end-of-year testing program.

A control group was selected from thirteen classrooms in four different school districts during September 1971. Eight students were randomly selected from each of the thirteen classrooms for a total of 104 students. At the end of the school year, 84 of the students remained in school. These 84 students comprised the control group for the ESL Level I testing program.

The students in the experimental group and the control group were tested in group and the control group were tested again in May 1972 using the ESL Level I Oral English Test developed by the project staff

TABLE XII

ESL LEVEL II INTERIM TEST RESULTS
Average Percent Correct



and the Goodenough-Harris Drawing Test. Finally, a sample of 28 experimental students and 27 control students were given the <u>Comprehension of Oral Language</u>:

<u>A Test of Inter-American Series</u> at the same time the other post-tests were administered.

The Goodenough-Harris Drawing Test, a standardized test of general ability, was used to compare the experimental group with the control group on general intellectual maturity. Means and standard deviations for the groups on this test are presented in Table XIV.

An analysis of variance statistical treatment was used to compare the two groups' scores on the Goodenough-Harris Drawing Test. Group membership (i.e. experimental or control) and sex were the two variables for which scores were tested by the analysis. The results of the analysis of variance are presented in Table XIII. The statistical test indicated that there were no significant differences between the experimental group and control group, but that there were significant differences between boys and girls. The experimental and control group boys had higher scores than the experimental and control group girls. However, the groups were considered comparable in general ability for the purpose of the ESL Program.

The students' scores on the ESL Level I pretest were also compared using theanalysis of variance technique. The results of the analysis of variance are presented in Table XV and means and standard deviations for the groups are displayed
in Table XVI. The analysis of variance indicated that there were statistically
significant differences between the experimental group and the control group on
the pretest scores. An examination of the means of the groups shows that the
control group boys and girls both had higher scores than the students in the
experimental groups. These results indicate that the control group students,
upon entry into kindergarten, had greater competence in speaking and understanding

TABLE XIII

ANALYSIS OF VARIANCE FOR GOODENOUGH-HARRIS DRAWING TEST (ESL LEVEL I STUDENTS)

| SOURCE OF VARIANCE | <u>D.F.</u> | MEAN SQUARE | F-RATIO |
|--------------------|-------------|-------------|------------|
| Group | 1 | 298.379 | 2.65 N.S. |
| Sex | 1 | 510.323 | 4.54 <.05 |
| Group By Sex | . 1 | 6.578 | 0.06 ัท.ร. |
| Error | 174 | 112.514 | |

TABLE XIV

MEANS AND STANDARD DEVIATIONS FOR THE GOODENOUGH-HARRIS DRAWING TEST. (ESL LEVEL I STUDENTS)

| | GIRLS | BOYS |
|--------------------|------------------------------|------------------------------|
| EXPERIMENTAL GROUP | Mean = 87.65 S.D. = 11.73 | Mean = 91.44 S.D. = 10.32 |
| CONTROL GROUP | Mean = 90.64 S.D. = 10.67 | Mean = 93.66 S.D. = 9.68 |

TABLE XV .

ANALYSIS OF VARIANCE FOR ESL LEVEL I PRETEST SCORES

| VARIANCE VARIANCE | <u>D.F.</u> | MEAN SQUARE | | F-RATIO |
|-------------------|-------------|--------------------|---|-----------------------|
| Group . | 1 | b 113.626 | | 25.13 < .01 |
| Sex | 1, | 3.282 | • | 0.73 N.S. |
| Group By Sex | 1 | 0.829 | | 0.18 N.S. |
| Error | 175 | 4.521 _. | • | .,, |

TABLE XVI

MEANS AND STANDARD DEVIATIONS FOR ESL LEVEL I PRETEST SCORES

| • | GIRLS | BOYS |
|--------------------|----------------------------|----------------------------|
| EXPERIMENTAL GROUP | Mean = 3.32 S.D. = 1.81 | Mean = 3.45 S.D. = 2:24 |
| CONTROL GROUP | Mean = 4.78 S.D. = 2.20 | Mean = 5.18 S.D. = 2.20 |

the English language than the experimental group students. This result can be explained at least in part by the way children were selected for the experimental group. Only those students who, in the opinion of the public school staff, were unable to function effectively in English were selected to participate in the Region One Bilingual Project. Control group students, on the other hand, were not grouped according to their ability to function in English. Consequently, the control group's scores on the ESL Level I pretest could reasonably be expected to be higher.

Although scores on the pretest indicated that the experimental group were less competent in English than the control group students, post test results show that the experimental group had slightly higher mean scores. The means and standard deviations for the post test, presented in Table XVIII, indicate that the mean scores for the experimental group boys and girls were 19.45 and 20.39 respectively, while the corresponding scores for control group boys and girls were 18.30 and 17.95. However, the differences in post test scores were not statistically significantly (Table XVII).

Because of the differences between the scores of the experimental group and the control group on the ESL pretest, the pretest scores were used as a covariate in an analysis of covariance treatment of the ESL Level I post test scores. The purpose of the analysis of covariance was to statistically "adjust" the post test scores for differences noted on the pretest scores. The analysis employed the multiple linear regression model suggested by Bottenberg, et.al. The results of the analysis of covariance revealed that the post test scores were significantly higher for the experimental group students after they had been adjusted for

Robert A. Bottenberg, et al., <u>Applied Multiple Linear Regression</u>, (AD 413-123; Washington: Defense Documentation Center, 1963), Chapter 5.

TABLE XVII

ANALYSIS OF VARIANCE FOR ESL LEVEL I POST TEST SCORES

| SOURCE OF VARIANCE | D.F. | MEAN SQUARE | F-RATIO |
|--------------------|------|------------------|-----------|
| Group | τ . | . • . 144.588 | 2.02 N.S. |
| Sex | 1 , | 3.872 | 0.05 N.S. |
| Group By Sex | 1 | 18.314 | 0.26 N.S. |
| Error | 175 | 71.416 | · |

TABLE XVIII

MEANS AND STANDARD DEVIATIONS FOR ESL LEVEL I POST TEST SCORES

| , | GIRLS | BOYS |
|--------------------|------------------------------|-----------------------------|
| EXPERIMENTAL GROUP | Mean = 20.39 S.D. = 11.28 | Mean = 19.45 S.D. = 7.76 |
| | | |
| CONTROL GROUP | Mean = 17.95 S.D. = 7.31 | Mean = 18.30 S.D. = 6.75 |
| H* | <u>.</u> | d. |

differences in pretest scores. The adjusted means for the experimental group boys and girls were 20.66 and 21.83 respectively. The corresponding adjusted means for the control group boys and girls were 16.43 and 16.81. These results support the conclusion that if the students in the experimental group and control had all had comparable pretest scores, the post test scores of the experimental group would have been significantly higher than those of the control group.

A subsample of the experimental and control groups was administered a test from the Inter-American Series, named the <u>Comprehension of Oral Language</u>. The purpose of this test was to check the validity of the Esl Level I Oral English Test. A validity coefficient was calculated between the two tests using the Pearson product moment correlation. The validity coefficient was .420, indicating a moderate relationship. This coefficient, although somewhat low, indicates a substantial area of agreement between the two tests. The validity coefficient had been expected to fall near .500 because the two tests measured somewhat different aspects of oral English facility. The ESL Level I Oral English Test was designed to test the correctness of oral English sentence structure. In contrast, the <u>Comprehension of Oral Language Test</u> (Inter-American Series) was designed to test listening comprehension in English.

In order to ascertain whether the experimental group and control group scored differently on the <u>Comprehension of Oral Language</u> test, an analysis of variance statistical test was performed. The results of the analysis of variance, shown in Table XIX indicated that there were no significant differences between the two groups on the comprehension of oral English. The means for the two groups indicated that both the experimental and control group children scored near the upper limit of the test range. Both groups of students were able to comprehend oral English as presented in the test.

TABLE XIX

ANALYSIS OF VARIANCE FOR COMPREHENSION OF ORAL ENGLISH (INTER-AMERICAN SERIES) FOR ESL LEVEL I STUDENTS

| SOURCE OF VARIANCE | D.F. | MEAN SQUARE | F-RATIO |
|--------------------|------|-------------|-----------|
| Group | 1 | 4.436 | 0.45 N.S. |
| Sex | 1 | 7.912 | 0.81 N.S. |
| Group By Sex | 1 | 0.011 | 0.00 N.S. |
| Error | 51 | 9.820 | • |

TABLE XX

MEANS AND STANDARD DEVIATIONS FOR COMPREHENSION OF ORAL ENGLISH (INTER-AMERICAN SERIES) FOR ESL LEVEL I STUDENTS

| , | GIRLS | BOYS |
|--------------------|-----------------------------|-----------------------------|
| EXPERIMENTAL GROUP | Mean = 25.67 S.D. = 1.63 | Mean = 24.86 S.D. = 3.74 |
| • | | |
| CONTROL GROUP | Mean = 26.22 S.D. = 3.70 | Mean = 25.47 S.D. = 3.28 |

ESL Level II End-of-Year Test Results

Twelve of the fourteen first grade classrooms which participated in the ESL Level II Program also participated in the ESL Level II end-of-year test. The two classrooms not in the end-of-year test had been designated as migrant classes. Because of their abbreviated school year, these two classes had not begun when the student sample was selected. Similarly, they had completed their school year prior to scheduled post tests in May 1972.

The experimental group for the ESL Level II testing program consisted of 70 students. Six students were selected at random from each of the twelve classrooms and administered a pretest in September 1971. The same students were administered a post test in May 1972. Only two students who participated in the pretest were not available for the post test.

A control group consisting of 69 first grade students from twenty classrooms in eight different schools participated in both the pretest and post test phases of the ESL Level II Program. These students attended schools with socioeconomic levels and percentages of Mexican-American students similar to those of the schools participating in the Bilingual Project. All control group students had attended kindergarten and had received some training in oral English.

The students in the experimental group and the control group were administered the ESL Level II Oral English Test as a pretest in September 1971. The same test was administered as a post test in May 1972. In addition, the Goodenough-Harris Drawing Test was administered to students in each group in May 1972.

The Goodenough-Harris Drawing Test was administered to the experimental group and control group students as a measure of general ability. The students' scores were compared using an analysis of variance statistical treatment. The results of the statistical analysis, displayed in Table XXI, indicates that there were

TABLE XXI-

ANALYSIS OF VARIANCE FOR GOODENOUGH-HARRIS DRAWING TEST (ESL LEVEL II STUDENTS)

| SOURCE OF VARIANCE | <u>D.F.</u> | | MEAN SQUARE | | F-RATIO |
|--------------------|-------------|----------|-------------|--|------------|
| Group. | 1 | | 287.311 | ************************************** | 2.587 N.S. |
| Sex | 1 | • | 231.545 | • | 2.085 N.S. |
| Group By Sex | 1 | | 1.533 | | 0.014 N.S. |
| Error | 135 | ; | 111.052 | • | - |

TABLE XXII

MEANS AND STANDARD DEVIATIONS FOR GOODENOUGH-HARRIS DRAWING TEST (ESL LEVEL II STUDENTS)

| • | | GIRLS | BOYS | |
|--------------------|----|------------------------------|------------------------------|---|
| EXPERIMENTAL GROUP | | Mean = 93.00 S.D. = 11.57 | Mean = 95.37 S.D. = 10.35 | |
| | ·. | | | _ |
| CONTROL GROUP | | Mean = 89.91 S.D. = 9.51 | Mean = 92.71 S.D. = 10.61 | |
| | | | | j |

no significant differences due to group membership or sex. In other words, the experimental group students and control group students were similar in general ability. Means and standard deviations in Table XXII reveal that the scores for the two groups were comparable.

ESL Level II Oral English pretest scores were analyzed using an analysis of variance statistical treatment. The results of the analysis of variance, presented in Table XXIII, indicate that there were significant differences between experimental group students and control group students on the pretest. Inspection of the test score means (Table XIV) revealed that mean scores were higher for both boys and girls in the experimental group than for boys and girls in the control group. That is, the pretest scores indicate that the experimental students had greater oral English facility than the control students at the beginning of the school year. Further examination of the means reveals that the differences between the two groups were primarily due to the scores of the experimental group girls. Their mean scores were an average of approximately 4 points higher than the experimental boys' scores.

The post test scores for the experimental and control group students, when compared to the pretest scores, indicated that both groups had higher average post test scores. In addition, the experimental groups appeared to have made greater gains than the control group. The pretest and post test means for the two groups are presented graphically in Table XXV. The graph indicates that experimental boys and girls had similar rates of gain. Furthermore, both had a higher rate of gain than the control boys and girls.

The ESL Level II Oral English post test scores showed that the students in the experimental group again scored significantly higher than the control group students (Table XXVI). However, the observed differences in post test scores could have been due to differences in pretest scores. An analysis of covariance

TABLE XXIII

ANALYSIS OF VARIANCE FOR ESL LEVEL II PRETEST SCORES

| SOURCE OF VARIANCE | MEAN SQUARE | D.F. | F-RATIO |
|--------------------|-------------|------|-------------|
| Group | 473.508 | 1 | 6.631 < .05 |
| Sex | 143.884 | 1 | 2.015 N.S. |
| Group By Sex | 126.505 | 1 | 1.772 N.S. |
| - Error | 71.407 | 129 | • |

TABLE XXIV-

MEANS AND STANDARD DEVIATIONS FOR ESL LEVEL II PRETEST SCORES

| | GIRLS | BOYS |
|--------------------|-----------------------------|-----------------------------|
| EXPERIMENTAL GROUP | Mean = 23.58 S.D. = 9.03 | Mean = 19.54 S.D. = 8.24 |
| CONTROL GROUP | Mean = 17.85 S.D. = 7.71 | Mean = 17.72 S.D. = 8.79 |

TABLE XXV

MEANS FOR ESL LEVEL II
PRETEST AND POST TEST SCORES

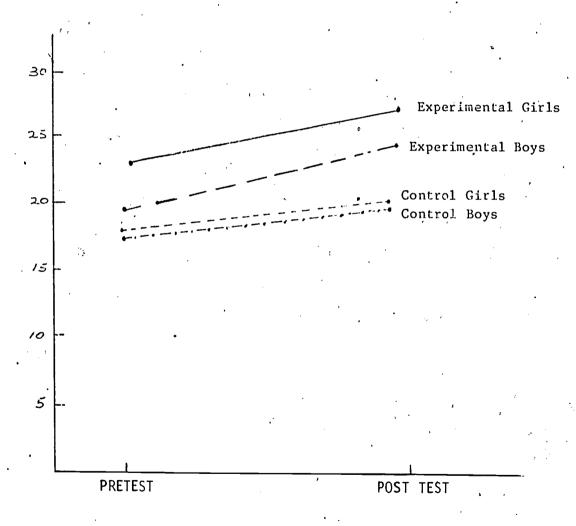


TABLE XXVI

ANALYSIS OF VARIANCE FOR ESL LEVEL II POST TEST SCORES

| SOURCE OF VARIANCE | ¥ . | MEAN SQUARE | D.F. | F-RATIO |
|--------------------|---------------------------------------|-------------|------|--------------|
| Group | | 1,160.064 | 1 | 16.373 < .01 |
| Sex | , , , , , , , , , , , , , , , , , , , | 81.779 | 1 | 1.154 N.S. |
| Group By Sex | | 40.179 | 1 / | 0.567 N.S. |
| Error | | 70.851 | 129 | · |

. TABLE XXVII

MEANS AND STANDARD DEVIATIONS FOR ESL LEVEL II POST TEST SCORES

| | GIRLS | BOYS |
|--------------------|-----------------------------|-----------------------------|
| EXPERIMENTAL GROUP | Mean = 27.37 S.D. = 9.17 | Mean = 24.77 S.D. = 8.40 |
| CONTROL GROUP | Mean = 20.54 S.D. = 7.67 | Mean = 20.09 S.D. = 8.36 |

was performed to determine if the observed differences in post test scores for the two groups were the result of differences in pretest scores. The purpose of the analysis of covariance was to statistically "adjust" the post test scores for differences in the pretest scores. The covariate analysis employed the multiple linear regression model suggested by Bottenberg, et al.²

The results of the analysis of covariance indicated that significant differences (<=.05) remained between the experimental group and control group after the post test scores had been adjusted for differences in pretest scores. That is, if the experimental group students and control group students had all had comparable scores on the pretest, the analysis of covariance suggests that the experimental group would have scored significantly higher on the post test.

^{2&}lt;sub>Ibid</sub>.

C. TRANSITIONAL ENGLISH READING

Objectives_

- 1. The Bilingual Project will conduct a field test of the Transitional English Reading Program developed during 1970-71 to teach native Spanish-speaking students to read in English. A stratified random sample of students (50 first grade and 50 second grade) will be administered a criterion test developed by the project staff as a post test. A criterion level of 80% of the students attaining a score of 80% or higher (composite score) has been selected. These students will not be compared with a control group because no comparable control group is available within Region One. Reading Programs in schools not participating in the project use the State adopted basal readers. Consequently, at the end of the first year of reading instruction, the two groups have different types of reading skills and cannot be directly compared.
- 2. An interim testing program will be established based on the 1971-72 revised reading booklets of the Transitional English Reading Program. Interim tests will be developed for each of the eight reading booklets. Interim tests will be administered by each classroom teacher upon completion of each reading booklet. A criterion level of 80% of the students in each classroom scoring 80% or better on each interim test has been selected for the interim testing program.

The Students

Twenty-four classrooms, containing approximately 700 students, participated in the Transitional English Reading Program during 1971-72. Fifteen of the classrooms were first grade and nine were second grade. Fourteen of the

first grade classrooms had completed the ESL Level I Oral English Program during 1970-71 and were enrolled in the ESL Level II Program. In addition, these first grade classrooms were completing the Spanish Reading Program which they had begun in kindergarten. In contrast, all the second grade classrooms had completed both the ESL Level I and ESL Level II Programs and the Spanish Reading Program in previous grades.

Measures

The objective for the Transitional English Reading interim testing program was to develop a series of eight interim tests. Only five interim tests were developed and administered during 1971-72. Each of the interim tests was printed and consisted of reading comprehension and spelling subtests.

The reading subtests for tests 1-4 consisted of a word, phrase, or sentence with four pictures to which the students responded by marking an "X" on the picture corresponding to the words. On test 5, students were also presented written sentences and short paragraphs and required to select written responses. The spelling subtest presented a picture and the students responded by spelling the word or by supplying missing letters to a word.

The end-of-course achievement test for the Transitional English Reading Program, developed by the Project staff, was administered during May 1972. It consisted of subtests on spelling word recognition, sentence comprehension, and paragraph comprehension. The test was administered to the class as a group by the classroom teacher.

Results Of The Interim Testing Program

All twenty-four of the first and second grade classrooms in the Transitional English Reading Program participated in the interim testing program. Both first and second grade classrooms grouped their students for English Reading

within a classroom after they completed the corresponding reading booklet.

Records indicate that thirteen first grade and eight second grade classrooms had at least one group of students who completed six of the reading booklets.

Consequently, interim test data is available for all five of the interim tests.

Test data for the first grade and second grade classrooms are summarized in Tables XXVIII and XXX, respectively.

A criterion level of 80% of the students in each classroom achieving 80% correct on each interim test was arbitrarily selected as the objective for the interim testing program. However, after reviewing results of the pilot program, the criterion was revised. The criterion level was subsequently set as 75% of the students attaining 75% correct on each interim test.

A summary of the percentage of first grade students in each classroom who scored 75% or higher for interim tests 1-5 is presented in Table XXVIII. The results are presented graphically in Table XXIX. The tables indicate that eleven of the fifteen classrooms (73%) attained the criterion on Test #1 and fourteen of the fifteen (93%) reached it on Test #2. All fifteen classrooms (100%) achieved the criterion on both Test #3 and Test #4. Finally, on Test #5, twelve classrooms administered the test and ten (83%) reached the criterion.

A summary of the percentage of second grade students in each classroom who scored at least 75% correct for interim tests 1 through 5 is presented in Table XXX. A graphic display of the percentage of classrooms attaining the criterion is presented in Table XXXI. The tables indicate that five of the seven classrooms that administered the test reached the designated level on Test #1 (two classrooms did not administer Test #1). For Test #2, eight of the nine classrooms achieved the criterion. For the remaining interim tests, all classrooms achieved the criterion (one classroom did not return Test #5).



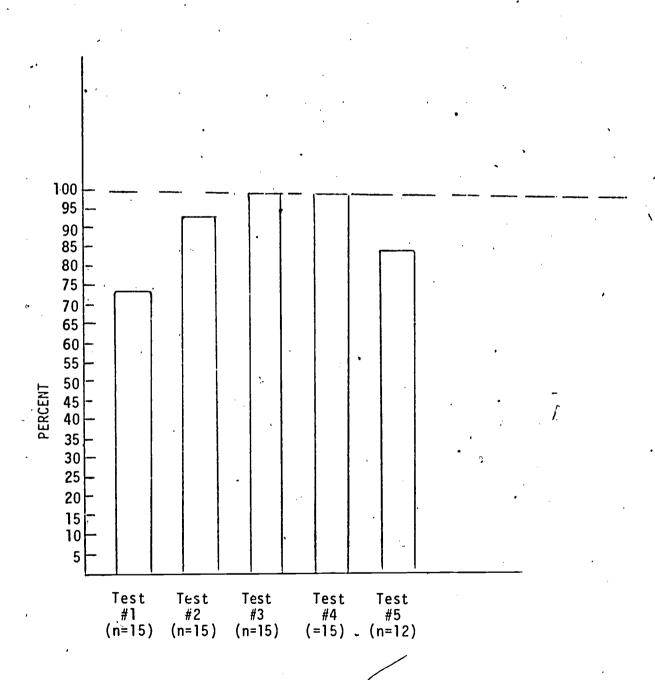
TABLE XXVIII

TRANSITIONAL ENGLISH READING - FIRST GRADE INTERIM TEST RESULTS (Percentage of Students Scoring 75% Correct)

| | | | | (| | | | | | | | | | : | • |
|------------|------|-----|------------|-----|------|--------|---------|-------|-------|------|----------|-----------|------|------|-------|
| ## 96 m | 100% | est | 100% | 95% | %02 | Test | 71% | . %98 | %98 | 300L | 80% | %06 | 92% | 94% | 100% |
| TEST N | 17 | | | 12 | 24 | N- | 7 | 58 | . 82 | 19 | 20 | 21 | 13. | 18 | 18 |
| | | | | | * | | | | | | | | | | |
| .` | | | | | | | | | | | • | | • | | |
| # % | 868 | 81% | 100% | 85% | 100% | 96% | %9/ | 77% | %11% | 100% | 80% | 95% | 93% | 85% | %96 |
| TEST N | 27 | 31 | · 9 | 56 | 24 | 25 | 12 | 31 | 31 | 20 | 20 | ر 21 | | 52 | 28 |
| · | | | | | | | • | | (| | | | • | | |
| | , | | | | | | | | * | | • | | • | | |
| % ## % | %06 | 81% | 100% | %06 | 100% | , %001 | %06 | 93% | 93% | 100% | 85% | 100% | 95% | 93% | %96 |
| TEST N | 30 | 31 | 13 | 53 | 27 | 56 | 20 | 30 | 30 | 28 | 20 | 23 | 12 | 27 | 56 |
| | | | | | • | .• | | | | | | | | | |
| • | .*- | | | | | | • | | | • | | | | | |
| 2 % | %06 | 85% | 93% | 83% | 100% | %96 | % 98 | 83% | 83% | 100% | 100%. | %98 | 95% | .67% | 93% |
| TEST N | | 33 | 4 | 30 | 30 1 | 56 | | 30 | | | 3 | 22 | . 25 | | . 82 |
| F 1 | m | (1) | _ | (1) | (*) | (2) | | | (*) | _ | _ | ~ | , | | |
| | | | ٠ | | | • | | | | | ä | \$ | | | • |
| # % | 80% | 82% | 68% | 84% | 80% | 26% | 33% | 80% | 80% | 93% | . 85% | 13%° | 93% | 77% | . 88% |
| TEST | 20 | 28 | 25 | 25 | 20 | 27 | 12 | 30 | 30 | . 82 | 13 | 30 | 15 | 97 | 56 |
| | , | | | | | | • | | | | | | • | | |
| HER. | | | | - | | t. | | | | | <i>:</i> | • | | | • |
| TEACHER | _ | 2 | က | 4 | 5 | | , | ω | 6 | 10 | . = | 12 | 13 | 14 | 15 |
| | | | | | | | | 60 |) | ; | - | | | | |

TABLE XXIX

TRANSITIONAL ENGLISH READING - FIRST GRADE INTERIM TEST RESULTS
Percentage of Classrooms Attaining Criterion



ERIC

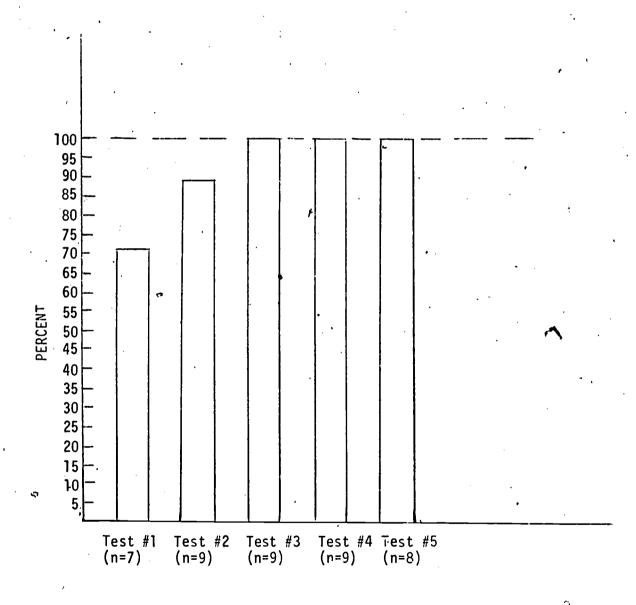
TABLE XXX

TRANSITIONAL ENGLISH READING - SECOND GRADE INTERIM TEST RESULTS (Percentage of Students Scoring 75% Correct)

| TEST #5 | 8 86% | No Test | %001 L | 4 100% | 3 100% | 9 100% | 1 100% | 3 100% | 3 87% |
|--------------|-----------|---------|--------|--------|--------|--------|--------|--------|-------------|
| ⊢ 1 | 2 | | en | | _ | 2 . | e - | 2 | , 2 |
| # % | | | | | | | _ | | |
| TEST | 30 | 56 | 31 | .24 | 9 | 30 | 782 | 24 | 25 |
| | | • | | | • | | | | |
| #⊧. 9ઠ દ | | | | | | | | | |
| TEST | 33 | 30 | 59 | 23 | 91 | 30 | 59 | . 24 | 27 |
| | | ٠ | | | | | • | | |
| # % | . %/8 | %06 | 94% | 85% | , %36 | %96 | 100% | ,90% | 73% |
| TEST | 15 | 53 | 31 | 22 | · 61 | 24 | 53 | 50 | 29 |
| • | | | | | | | • | , | |
| % #F | 80% | %29 | Test | Test | 79% | 88% | 87% | 95% | %29 |
| TEST N | 30 | 15 | CN | No | 19 | , 32 | 30 | 19 | 12 · |
| TEACHER | - | .2 | ന | 4 | ب | , , | 7 / | ∞ | ່ ຫ • , |

TABLE XXXI

TRANSITIONAL ENGLISH READING - SECOND GRADE INTERIM TEST RESULTS
Percentage of Classrooms Attaining Criterion



The results of the first and second grade interim tests indicate that the objective of each classroom achieving a specified criterion level of performance on each test was not attained. However, one problem was found in working exclusively with class percentages. Some classrooms had more students than others, but total class percentages have obscured these numerical differences. For this reason, total group statistics have been calculated for both the first and second grade groups.

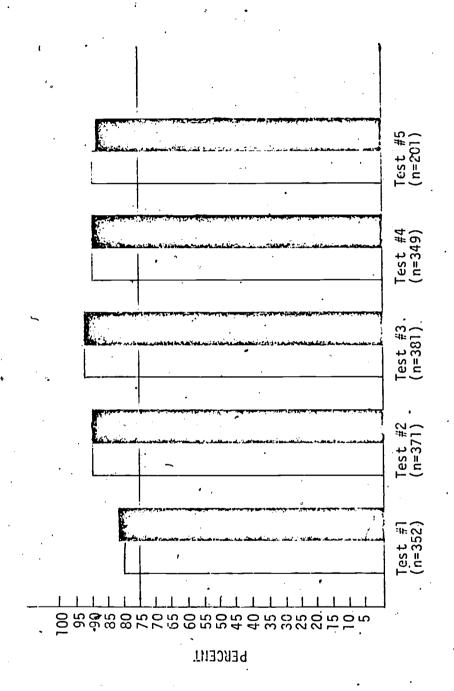
A set of summary statistics for all first grade students is presented in Table XXXII. These statistics reveal that over 75% of all the first grade students participating in the project scored at or above 75% correct on each of the five interim tests. The table also shows that the mean percent correct (i.e. average score) for the first grade group was above 75% for every interim test.

Summary statistics for the total second grade group is displayed in Table XXXIII. These statistics indicate that on every interim test 75% or more of the students in the second grade Transitional English Reading Program scored above 75% correct. Similarly, the mean percentage correct (average score) for the second grade group was greater than 75% for every interim test.

Results Of The End-of-Program Test

Fifteen first grade and nine second grade classrooms containing a total of approximately 700 students participated in the Transitional English Reading Program in 1971-72. Although the performance objective for the end-of-year testing program had limited the number of students taking the test to 50 first graders and 50 second graders, the test was actually administered to a total of 490 students. The change was made possible because a group reading test was developed to replace the individual test used in 1970-71. The number of

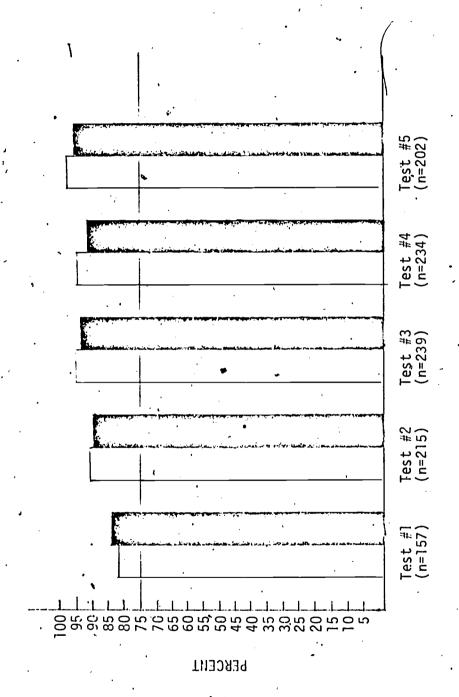
, TABLE XXXII TRANSITIONAL ENGLISH READING TOTAL FIRST GRADE GROUP - SUMMARY STATISTICS



↑ PERCENT OF TOTAL FIRST GRADE GROUP SCORING ABOVE 75% CORRECT

MEAN PERCENT CORRECT FOR THE TOTAL FIRST GRADE GROUP

TABLE XXXIII TRAHSITIONAL ENGLISH READING TOTAL SECOND GRADE GROUP - SUMMARY STATISTICS



PERCENT OF TOTAL SECOND GRADE GROUP SCORING ABOVE 75% CORRECT

1 MEAN PERCENT CORRECT FOR THE TOTAL SECOND GRADE GROUP

students taking the test represents all students for whom the test was considered appropriate. The primary reasons for the discrepancy between the number of students in the program and the number that completed the end-of-program test were (1) early student withdrawal from school and (2) students who had not completed reading booklet 5 were not given the test.

The end-of-program test for the Transitional English Reading Program consisted of five subtests and a total score. The average percent correct for each of the five subtests and the total score for both first and second grade students is presented in Table XXXIV. Scores for first and second grade students were similar for all subtests and the total score. The table also indicates that scores were directly related to the number of books completed. That is, students who completed reading booklets I through 5 had lower scores than those who completed additional booklets. This result was expected because the test contained material from each of the first seven reading booklets. However, it should be noted that very small numbers of students were tested at some levels (i.e. grade 2, booklet 6) and the results may be somewhat unstable for these groups.

The first subtest consisted of a set of pictures and required the students to write the name of the object in the picture. The table shows that student scores ranged from a low of 55% to a high of 79% correct. Since the words were selected primarily from books 1-5 (75% of the items), all students were expected to score above 50% on this subtest.

The second subtest consisted of a series of items which contained a picture and three sentences. The student was required to select the sentence which corresponded to the picture. Scores on this subtest ranged from 72% to 92%. This distribution of scores is somewhat higher than expected since half the items contained word patterns which had not been presented in reading booklets 1-5.

ERIC*

TABLE XXXIV

TRANSITIONAL ENGLISH READING END-OF-PROGRAM TEST AVERAGE PERCENT CORRECT - FIRST GRADE AND SECOND GRADE STUDENTS

| TOTAL SCORE | 71% | %69 | 84% | %98 | | . 71% | 76% | 87% | 87% |
|---------------------------------|---------|-----|-------------|-------|-----|-------|------------------|--------------|-----|
| PARAGRAPH COMPREHENSION | 29% | 26% | %29 | . 87% | | 71% | . 48% | .75% | 83% |
| WORDS | 79% | %91 | . %36 | 94% | . • | 72% | 92% | 95% | 93% |
| WORDS | 94% | 94% | %66 · · | %66 | | 87% | %66 | %36 | %26 |
| SENTENCE COMPREHENSION | 72% | 74% | %68 | 91% | | 73% | . 33% | %06 | %26 |
| SPELLING | 58% | 55% | 73% | 71% | | 63% | %19 | 79% | 79% |
| READING BOOKLET COMPLETED | ഹ | . 9 | | ∞ | 2 0 | വ | 9 | 7 | ω |
| NUMBER TESTED | 64 | 111 | 29 | 52 | | 21 | · ເວ | 53 | 138 |
| GRADE LEVEL | | | ;- - | - | | 5 | 5, 6 8 | ₂ | 2 |

Subtests 3 and 4 consisted of a series of words and pictures. Students were asked to match the word with its corresponding picture. Subtest 3 contained only words from reading booklets 1-4 while subtest 4 contained words from booklets 4-3. The results of the analysis indicate that, as expected, scores on subtest 3 were high for all students. Scores on subtest 4 were lower for students who had completed fewer reading booklets, although not as low as expected.

Subtest 5 contained three short paragraphs (4-5 sentences). At the end of each paragraph there were several statements for the students to complete. Students responded by checking the word which correctly completed the statement. Although this subtest was considered the most difficult, scores ranged from 48% to 87% correct, depending upon the number of reading booklets the students completed.

Total scores for the achievement test ranged from 69% to 87%. Students in first grade had scores which closely corresponded to those of second grade students who had completed the same reading booklet. This result would indicate that maturity was not a significant factor for these students. In addition, it was noted that all second grade students had completed both the ESL Level I and ESL Level II Programs prior to second grade, while the first grade students were taking the ESL Level II Program concurrently with Transitional English Reading. The results of the achievement test indicate that it is not necessary to complete the ESL Level II Program before beginning the Transitional English Reading Program.

The objective for the Transitional English Reading Program stated that 80% of the students would achieve a score of at least 80% (total score) on the final achievement test. Table XXXV shows the degree to which this objective was achieved. All the students who completed fewer than 7 of the

TABLE XXXV

TRAWSÍTIONAL EWGLISH READING END-OF-PROGRAM TEST Percent of Students Scoring Above 80% (Composite Score)

| PERCENT ABOVE 80% | . 42% | 38% | .72% | 79% | • | 52% | 63% | %62 | 80% | |
|---------------------------------|-------------|-------------|-------------|-------------|---|--------------|--------------|--------------|--------------|---|
| . | | | • | | | | | | : | |
| NUMBER ABOVE 30% | 17 | 42 | 48 | 41 | - | | ഹ | 23 | 110 | • |
| | | | | * | | | | | | |
| NUMBER TESTED | . 64 | | 29 | 55 | | 21 | , ω, | 59 | 138 | |
| PEADING BOOKLET COMPLETED | 1n | . 9 | , 2 | ω | | ιύ | , 9 | 7 | ω | |
| GRADE LEVEL | First Grade | First Grade | First Grade | First Grade | • | Second Grade | Second Grade | Second Grade | Second Grade | |

reading booklets fell 25 or more percentage points below the criterion level (students in second grade, booklet 6 were not considered because only 8 students were tested). However, second grade students who completed booklets 7 or 8 and first grade students who finished booklet 8 either attained the criterion or fell within one percentage point of it. In addition, the first grade students who finished booklet 7 scored only 8 percentage points below the criterion. The analysis of the final achievement test indicate that the results are within acceptable limits of the objectives for the Transitional English Reading Program.

D. SOCIAL EDUCATION

The Social Education Program of the Region One Bilingual Project consists of a two-year sequence designated as Social Education (Level I) and Social Education (Level II). The Level I program contained six units in English and two units in Spanish, while the Level II program contained only units in Spanish.

Objectives

- 1. A set of Social Education units in English and Spanish were pilot tested during 1970-71. The project staff will conduct a field test of this Level I Social Education Program during the 1971-72 school year. The field test will include a random sample of at least 50 students in the project (25 first grade and 25 second grade) and 50 control group students (25 in first grade and 25 in second grade). The evaluation instrument will be a Social Education Test (Level I) developed by the project staff. Additional measures will be the Brown Self Concept Referents Test (pretest and post test) and the Goodenough-Harris Drawing Test.
- 2. An interim testing program based on the eight units of the Level I Social Education Program will be established. Interim tests will be given by each classroom teacher upon completion of each of the Social Education units. An average of 75% per classroom has been selected as the criterion level for the interim tests.
- 3. A Level II Social Education Program will be devcloped and pilot tested in 10 second grade classrooms during 1971-72.
- 4. An interim testing program based on the units to be developed for the Level II Social Education Program will be established. Interim tests

will be administered by the classroom teacher. A class average of 75% correct has been selected as the criterion level for the interim tests.

The Students

Thirteen first grade classrooms, containing approximately 350 students participated in the Social Education Level I Program. All students in the program had completed the ESL Level I Program and were enrolled in the Spanish Reading Program and the ESL Level II Program.

Two first grade classrooms and nine second grade classrooms, with a total enrollment of approximately 300 students participated in the Social Education Level II Program. Students in the two first grade classrooms were the same age as the second grade students, but had attended a beginners class in 1970-71. Some of these students had attended kindergarten prior to entering the beginner level and some had not. Consequently, these two first grade classes contained students who had already attended school for one or two years. The first grade students had completed ESL Level I and Social Education Level I and were enrolled in ESL Level II and Spanish Reading. The second grade students had completed ESL Level II, Spanish Reading, and Social Education Level I.

Measures

The Social Education Level I Program consisted of five units presented in English and three units presented in Spanish. Interim tests used in the 1970-71 pilot test were found to contain a number of ambiguous and invalid items. As a result, an interim testing program was not implemented during the pilot test. Similar problems were encountered during the field test conducted in 1971-72. A number of different types of interim tests were devised and tried out in the classrooms, but none were considered appropriate for measuring the concepts

presented in the Social Education Level I units. Because of the lack of success in developing valid interim tests, classroom observation by the Project Director and Social Education Supervisor/Consultant was used.

Problems similar to those described for the Level I interim tests were encountered in the Social Education Level II Program. Since the primary purpose of the pilot test was to determine the effectiveness of individual units of instruction, direct classroom observation by the curriculum writer was considered most appropriate. As a result, no interim tests or end-of-year achievement test were constructed for the Social Education Level II Program.

An end-of-year achievement test was developed for the Social Education Level I Program using the most successful techniques devised for the interim testing. This test consisted of 38 items about concepts presented in the Social Education Level I units. The test was administered orally by a project staff member to individual students. The student's responses were recorded on tape. The tapes were then transcribed and scored by a Bilingual Project staff member.

Results Of The End-Of-Program Test For Social Education Level I

All thirteen classrooms in the Social Education Level I Program participated in the end-of-Program achievement test. A total of 42 students were selected for the sample (three students were randomly selected from each classroom).

A control group consisting of 21 students was selected from four schools not participating in the project. The control schools were selected because the socioeconomic levels and percentage of Mexican-American students were comparable to the schools in the Bilingual Project.

* Students in the experimental group and the control group were administered both the Goodenough-Harris Drawing Test and the Social Education Level I achievement test. Both tests were given by a Bilingual Project staff member in May 1972.

The Goodenough-Harris Drawing Test, a standardized test of general ability, was used to compare the experimental group and control group on general intellectual maturity. An analysis of variance statistical technique was used to compare the scores of the two groups. The results of the analysis, presented in Table XXXVI, indicated that there were no significant differences between the experimental and control students' scores. Means and standard deviations for the groups are presented in Table XXXVII.

The experimental group and the control group were also compared on the Social Education Level I achievement test. The results for the analysis of variance of these scores are presented in Table XXXVII. The analysis indicated that the experimental students had significantly higher Social Education test scores than the control group. There were no significant differences between scores for boys and girls in either group.

Although the analysis indicated that the experimental groups' scores were significantly higher, an inspection of the means for the two groups revealed that the differences were less than had been expected. The mean for the experimental groups' scores was 24.60 (25.45 for girls; 23.82 for boys) while the mean for the control group was 19.38 (20.18 for girls; 18.50 for boys). An analysis of the Social Education test used to measure achievement indicated that it dealt primarily with facts rather than the concepts presented in the Social Education units. Since the test measured information which is generally learned by all students, the experimental groups' scores were not very different from those of the control group.

TABLE XXXVI

ANALYSIS OF VARIANCE FOR GOODEHOUGH-HARRIS DRAWING TEST (SOCIAL EDUCATION LEVEL I STUDENTS)

| SOURCE OF VARIANCE | D.F. | • , | MEAH SQUARE | F-RATIO |
|---------------------|-------|------------|-------------|------------|
| Group | . 1 . | <i>i</i> . | 140.005 | 1.17 N.S. |
| Sex | 1 | | 311.450 | 2.61 11.5. |
| Group By Sex | 1 | | 29.309 | 0.25 11.5. |
| Error | , 53 | • | 119.498 | |

TABLE XXXVII

MEANS AND STANDARD DEVIATIONS FOR THE GOODENOUGH-HARRIS DRAWING TEST (SOCIAL EDUCATION LEVEL I STUDENTS)

| | , GIRLS | BOYS |
|----------------------|------------------------------|------------------------------|
| · EXPERIMENTAL GROUP | Mean = 88.89 S.D. = 11.85 | Mean = 95.24 S.D. = 12.07 |
| ∼CONTROL GROUP | Mean = 93.64 S.D. = 7.53 | Mean = 97.00 S.D. = 10.06 |

TABLE XXXVIII

ANALYSIS OF VARIANCE FOR SOCIAL EDUCATION LEVEL I END-OF-PROGRAM TEST

| SOURCE OF VARIANCE | D.F. | MEAN SQUARE | • | F-RATIO . |
|--------------------|------|-------------|---|------------|
| Group . | . 1 | 391.359 | | 13.94 <.01 |
| Sex | 1 | 38.344 | 1 | 1.37 N.S. |
| Group By Sex | 1 | G.009 | | 0.00 11.5. |
| Error | 59 | 28.074 | | |

TABLE XXXIX

MEANS AND STANDARD DEVIATIONS FOR SOCIAL EDUCATION LEVEL I END-OF-PROGRAM TEST

| | GIRLS . | BOYS |
|--------------------|-----------------------------|-----------------------------|
| EXPERIMENTAL GROUP | Mean = 25.45 S.D. = 5.34 | Mean = 23.82 S.D. = 5.52 |
| CONTROL GROUP | Mean = 20.18 S.D. = 5.31 | Mean = 18.50 S.D. = 4.65 |

APPENDIX A

Bilingual Project Administrative Staff

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BILINGUAL PROJECT STAFF

PROJECT DIRECTOR - A. R. Ramirez

Twenty years experience as teacher, principal, curriculum director, and college instructor; directed Title III Project which developed ESL Level I and Level II Rock materials used in the Bilingual Project. This is his third year as Project Director for the Region One Bilingual Project.

EVALUATOR - Ricardo R. Chapa ...

Experience includes classroom teacher, principal, director of private school in Honduras, and consultant for a Bilingual Project in Lansing, Michigan. This is his second year with the Bilingual Project.

EVALUATION CONSULTANT- Thomas H. Linton

Experience includes internship with an educational research organization (Teaching Research, Honmouth, Oregon) and research associate with ERIC/Cress; holds a doctorate in Educational Administration/Research. This is his second year with the Bilingual Project.

PRIMARY SUPERVISORS - Corina Lozano, Oralia Rivas, Dora Soto and Lydia Miller All have experience in teaching at the primary level and are bilingual. Three of the supervisors have been with the project since its inception.

CONSULTANTS ON CULTURAL ENRICHMENT ACTIVITIES - Carmina Garza and Beverly Pritchard Both supervisors have experience in primary level teaching. One is a certified teacher in Mexico with a one-year internship in Montessori teaching methods in Italy.

ARTIST/ILLUSTRATOR - Virginia Bruce

Experience includes primary level teacher and commercial illustrator. This is her third year with the Bilingual Project.

SITE AIDES - Gloria Campos, Mary Sandoval, Maria Enriques, Viola Vera and Elva Garza

Each has had experience either as a teacher aide or in the control and accountability of materials.



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APPENDIX B

Materials and Equipment

for

Bilingual Project Components

SPANISH READING

INSTRUCTIONAL MATERIALS

Teachers Manual
Alphabet Trays and Loose Letters
Vocabulary Cards
Sound-Letter Correspondence Cards
Workbooks (8), "Sonidos, Letras y Palabras"
Bingo Game

MEDIA EQUIPMENT NEEDED

None -

ENGLISH AS A SECOND LANGUAGE LEVEL I

INSTRUCTIONAL MATERIALS

Teacher's Plan Book
Manual with 128 Language Lessons
Filmstrips Synchronized with Records
Puppets and Masks
Song Recordings
Audio-Flashcards
Objects for Teaching Lessons

- a. Small Objects Bag
- b. Puppet Bag.
- c. Big Object Bag
- d. Kitchen Objects Bag
- e. Paper Pack

Bookle'ts

- a. Illustrations of Audio Flash Cards
- b. Index of Sentence Patterns
- c. Language Card Index
- d. Mask Booklet
- e. Puppet Booklet
- f. The First Week

MEDIA EQUIPMENT NEEDED

Tape Recorder (EFI or Bell & Howell Machine for Language cards) Overhead Projector Filmstrip Projector/Record Player



ENGLISH AS A SECOND LANGUAGE LEVEL II

INSTRUCTIONAL MATERIALS

Teacher's Plan Book Manual with 115 Language Lessons Illustrations for Lessons Objects for Teaching Lessons

- a. Kitchen Objects
- b. Paper Objects
- c. Puppet Bag
- d. Toys

MEDIA EQUIPMENT NEEDED

None -

TRANSITIONAL ENGLISH READING

INSTRUCTIONAL MATERIALS

Teacher's Guide
Alphabet Trays and Loose Letters
Vocabulary Cards
Sound-Letter Correspondence Cards
Workbook's (8), "English Encoding Exercises"

MEDIA EQUIPMENT NEEDED

None \



SOCIAL EDUCATION LEVEL I

INSTRUCTIONAL MATERIALS

Teacher's Manual
Units
Transparencies
Audio Tapes
Filmstrips
Pictures
Cutout Picture Sheets
Student Worksheets
Class and School Photograph
Costumes
Stories

MEDIA EQUIPMENT NEEDED

Filmstrip Projector Tape Recorder Overhead Projector

SOCIAL EDUCATION LEVEL II

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INSTRUCTIONAL MATERIALS

Teacher's Manual
Units
Maps
Cnecks, Denosit Slins
Audio Tapes
Filmstrips
Costumes
Stories

MEDIA EQUIPMENT NEEDED

Filmstrip Projector Tape Recorder

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APPENDIX C

Status of Objectives for 1971-72

A. Review of Activities for 1971-72

- 1. Program Management
 - a. The degree to which the 1971-72 product/process objectives have been attained:
 - (1) Staff Development (Product Objectives)
 - (a) Objectives 1 4:

 The project director collected information from parents
 (Parent meetings, parent survey), teachers (weekly commentaries, teachers meetings), project staff (supervisor reports, staff meetings), and evaluative data to identify the 1971-72 program objectives and performance objectives for the Region One Bilingual Project. Staff needs were identified and qualified personnel hired. The organizational structure for the project was explained to the project staff at the first formal staff meeting.
 - (2) Staff Development (Process Objectives)
 - (a) Objectives 5 and 6:
 The responsibilities of each staff member were discussed and delineated at the first formal staff meeting. Supervisor/consultants were assigned to program areas as specified. However, the areas of Spanish Reading and Spanish Language Arts were assigned to a single supervisor/consultant. Consequently, only four supervisor/consultants were assigned to the project.
 - (b) Objective 7:
 Site aides were employed at each of the five schools participating in the project. Responsibilities were explained by the project director prior to employment.
 - Mother aides were provided in four of the five project schools by the Bilingual Project. They were employed in classrooms which lacked teacher aides. Although all project schools have changed mother aides at least once, only two of the four schools have changed every twelve weeks as specified in the objectives. The other schools have been reluctant to change mother aides because the teachers did not want to assist in training new aides, school principals did not want to bring new mother aides into the school during the school year, and the supply of qualified mother aides was limited. A total of forty-five (45) mother aides have talen part in the program.
 - (d) Objectives 9 and 10:
 All staff positions were filled prior to August 1, 1971. The professional qualifications of each staff member are on file in the Region One Education Service Center personnel files.

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(e) Objective 11:

A communications network consisting of weekly commentaries by the teachers, oral reports by supervisor/consultants, formal and informal staff meetings, and written reports by the project evaluator and supervisor/consultants: The communication system was explained to the staff members in a staff meeting prior to the beginning of the school year.

(f) Objectives 12 - 15:

A time schedule for evaluation activities was completed and posted in the directors office by September 1, 1971. Formal time schedules for materials development and staff development activities were not established. Because of the multiple responsibilities assigned to the director and the supervisor/consultants, strict scheduling of these activities could not be accomplished. Inventory schedules for controlling materials disseminated to the schools were established and maintained by the supervisor/consultant in each program.

- (g) Objective 16:
 Progress charts were established for each classroom and have been updated weekly.
- (3) Community Involvement (Product Objectives)
 - (a) Objective 17:

The community involvement program has included a variety of activities designed to inform parents, the general community, local university students, and other professional persons of the purposes and activities of the Region One Bilingual Project. Formal meetings between the project staff and parents were conducted in two of the participating schools. Parents in a third school were invited to observe their children and become familiar with the Bilingual Program. Another school held an open house to inform the public about bilingual education. However, parent committees were not organized because needed inputs into the program were already available.

The project director has made presentations to the Region One Education Service Center Board and to the Region One Joint Committee (composed of all superintendents in Region One). In addition he has met at least twice with each superintendent of the five schools in the project. The project staff has also made presentations to the members of the school board for two of the project schools.

Two 30-minute television presentations have been shown on a local television station. The shows included an explanation of the programs contained in the Bilingual Project and live classroom demonstrations of program activities. In addition, a 15-minute summary of the Bilingual Project was presented on state-wide television program sponsored by Senator John Tower.

Dissemination activities to bilingual projects, university groups, and public school personnel not in the Region Che Bilingual Project have included thirty-three (33) presentations and workshops.

Interviews with minety-four (94) parents of children in the project have been conducted. Results of the parent interviews indicate that 95% (89) have a positive attitude toward the child learning to read in Spanish, while 1% (1) was not sure that the program was good, and 4% (4) did not comment. When the parents were asked their opinion of the methods used to teach oral English, the percentages of favorable and unfavorable responses were 95% and 4% respectively, while 1% did not have an opinion.

- (4) Community Involvement (Process Objectives)
 - (a) Objective 18:

 Mother aides were hired and placed in classrooms that did not have teacher aides. All project schools have changed mother aides at least once. However, only two of the four project schools employing mother aides changed aides every twelve weeks. The other schools did not wish to change aides as often during the school year. A total of forty-five (45) mother aides have taken part in the program this year.
 - (b) Objective 19:
 Site aides have acted as community liaison persons and have also been instrumental in obtaining mother aides to participate in the project. Oral reports to the project director and consultants provides a continuous source of feedback from the school and the community.
 - (c) Objective 20:

 A random sample of parents from each community was selected and interviewed during February and March 1972. Interviews were not conducted during October because of limitations in time and personnel. The results of the survey are presented in Community Involvement (Product).
 - (d) Objective 21:
 No negative feedback from parents or members of the community have been reported to the project director.
- (5) Regional Coordination Activities
 - (a) Objectives 22 31:
 This component was cancelled due to limited participation of other bilingual projects
- b: An analysis of successes and failures in meeting performance objectives.

The project was successful in meeting most of the objectives for staff development. A staff was assembled and organized as specified. The only major medification was the assignment of one supervisor/consultant to both the Spanish Reading Program and the Spanish Language Arts Program. Site aides were hired and assigned to each school. Mother aides were

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hired, trained, and assigned to classrooms. However, two of the schools changed aides at the end of the first 12 weeks but requested that they be allowed to keep the new aides for the rest of the school year. The reasons for the requests were that changing aides during the year caused confected in the classrooms and it was difficult to find enough qualified mother aides to change every 12 weeks.

The Community Involvement program was successful in maintaining parent interest and acceptance of the Eilingual Project. Although parent committees were not organized, communication with parents was accomplished in several ways. Television proved to be an effective means of demonstrating the classroom application of project goals. Feedback from parents was received from formal meetings, comments to teachers add site aides, and response to a formal interview.

The project was also successful in disseminating information to public school and university personnel not associated with the project. The number of presentations and in-service programs has increased significantly over previous years. In addition, requests for materials by other bilingual projects and public schools has increased.

c. Modification of Long Range Objectives

We have dropped the plan to provide inter-project coordination between Bilingual Projects within Region One.

d. Modifications or Refinements of the Program

We will again attempt to increase community involvement through a Community Developer. A part-time Staff Development Coordinator will be employed to plan all staff development activities.

e. General Assessment

Now that there are classes who have completed three years of intensive bilingual language arts instruction we have been able to demonstrate to administrators and board members the great gains that are effected. Continued exposure on T.V. has created public awareness of the potential for this revolutionary (in the U.S.) method of instruction.



2. Spanish Reading

- a. The degree to which 1971-72 product/process objectives have been attained:
 - (1) Instruction (Product Objectives)
 - (a) Objective 32:

 A field tent of the level I Spanish Reading program has been conducted in 18 kindergarten and 12 first grade classrooms with a total enrollment of approximately 875 students during the 1971-72 school year. Post-test data are presented in the body of this report.
 - (b) Objective 33:

 The level 1 Spanish Reading program was not completed by any of the participating classrooms during 1970-71. Consequently, classrooms scheduled to enter the Spanish Language Arts program in September 1971 were rescheduled in order to complete the level I program. It is now anticipated that the level I Spanish Reading program will become a 1 1/2 year program covering kindergarten and the first semester of first grade. Since the Spanish Language arts program was designed to reinforce concepts in the level I Social Education program, it will be merged with the level I Social Education program next year and will not be field-tested as a separate program.
 - (2) Instruction (Process Objectives)
 - (a) Objective 34:
 Students in the level I Spanish Reading program are spending at least thirty (30) minutes per day in Spanish reading activities as required. Each teacher in the Spanish Reading program submitted a schedule of daily teaching activities to the project evaluator by October 15, 1971.
 - (b) Objective 35:

 An interim testing program based on the eight reading booklets in the Spanish Reading program has been established. Interim tests 2, 3, 4, 5, and 6 have been revised on the basis of the 1970-71 interim testing program. Interim test 7 was developed this year. Interim tests have been administered by the classroom teachers upon completion of each Spanish reading booklet. Results of the interim testing program are presented in Section A of this report.
 - (c) Objective 36:
 Teacher commentaries are submitted weekly by each project teacher.
 - (d) Objective 37:
 The end-of-year Spanish Reading Test was revised on the basis of the 1970-71 testing program and the revisions made in the Spanish reading booklets.

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- (e) Objective 3%:
 Spanish language atoryphecks have been screened, purchased, and made available to the project clasercoms. Approximately forty (40) separate titles have been purchased.
- (f) Objectives 32 and 40:
 Since the Spanish Reading program was not completed by the binder-garton classrooms, it was continued in the first grade classrooms.

 Consequently, the Spanish Language Arts program has had to be postponed until the Spanish Reading program was completed. In addition, the Spanish Language Arts program was designed to reinforce concepts introduced in the Tevel I Social Education program and to maintain spanish Reading shills. Therefore, the Spanish Language Arts program will not be field-tested during the 1971-72 school year. It will be merged with the level I Social Education program and field-tested as a part of that program during the 1972-73 school year.
- (3) Development of Materials (Product Objectives)
 - (a) Objective 41:
 The teacher training program for the Spanish Reading program has been partially developed. Video tapes have been completed as scheduled. In addition, a, 35 MM slide series has been completed.
 - (b) Objective 42:

 A supplementary reading list for the Spanish Language Arts program has not been developed. Since one of the purposes of the reading series was to reinforce concepts introduced into the Social Education program, this series will be developed as a part of the Social Education program.
 - (c) Objective 43:
 Spanish reading booklets #7 and #8 were completed during the summer of 1971. Booklets #1, 2, 3, 4, and 5 have been revised on the basis of the 1970-71 field test.
- (4) Development of Materials (Process Objectives)
 - (a) Objectives 44 and 45:

 Items to be included in the teacher training program were identified on the basis of data from the first and second years of the Spanish Reading program. Dr. Gloria Massey has served as consultant for the program. A workshop for training kindergarten teachers to use the Spanish Reading program was conducted during the summer of 1971. Although the audiovisual materials to be included in the final teacher training package had not been developed at that time, the workshop provided additional data for subsequent program development.

- (b) Objectives 46 43:
 The project star, has developed a period of about provide and drawar in Special which reinforce concepts introduced in the level 11 Sector broads in project. Reviews by classes, in teacher are not presently small ask. Drawor, teacher consentering and interin test results are on file with the project evaluator.
- (5) Staff Development (Product Objectives)
 - (a) Objective 39:
 The plan for preservice and in-service training consisted of a preservice workshops in August for teachers and tracher aldes, in-service workshops during the first two weeks of school for mother aides (repeated every 12 weeks for new mother aides) and individual assistance for the tutors.
 - (b) Objective 50:
 Tutors were placed in two of the five perticipating schools. A tutor was already available in another school. The other schools have not requested a tutorial program.
 - (c) Objective 51:
 Baseline data on the teachers in the Spanish Reading program indicate that 21 of the 30 teachers are bilingual while 8 can's speak some Spanish but are not fluent. One teacher in the program cannot speak Spanish. The teachers who do not speak Spanish fluently have made arrangements for other teachers to teach Spanish Reading to their students.
- (6) Staff Development (Process Objectives)
 - (a) Objective 52:
 A two-day in-service workshop covering all components of the Bilingual Project was conducted on August 24 25, 1971.
 The workshop was attended by 41 of the 42 project teachers.
 Teacher aides did not attend the workshop.
 - (b) Objective 53:

 Mother aides attended workshops or received individual assistance from the Spanish Reading supervisor/consultant during the first two weeks of school. Mother aides who were hired for second and third 12-week periods during the school year received training from the Spanish Reading supervisor/consultant.
 - (c) Objectives 54 and 55:
 Only one supervisor/consultant has been assigned to the Spanish Reading component. She was assigned responsibility for the first year Spanish Reading program. The supervisor/consultant has visited each classroom weekly as scheduled. However, oral reports to the project director fellowed by written bi-weekly reports have supplanted the supervisor report used last year.
 - (d) Objective 56:

 The project director has met with the teachers participating in the Spanish Reading program four times during the school year.

b. An one lysis of the successor, and failures in meeting performance objectives.

Interim test data indicate that from 70% to 85% of the classrooms have achieved the selected criterion level on any slowle interim test. These results suggest that it is not readistic to empet all classrooms to addieve the criterion level on each interim test. Classrooms which have not attained the expected criterion level have received assistance from the Spanish Reading supervisor/consultant. However, progress chrough the Spanish reading booklets, has not been as rapid as anticipated. The majority of the kindergarten classrooms completed booklet 5. Since a similar rate of progress was evident during the 1970-71 school year, the project director has decided to make the Spanish Reading progress a 2-year progress.

The Spanish Language Arts program has been only partially developed and has not been field-tested this year. The major factor in the decision to post-pone the field test was the progress rate of the classrooms in the Spanish Reading program. As a result of the experience gained this year in field-testing the Spanish Reading program, the Spanish Language Arts program will be completely merged with the level I Social Education program and will be field-tested as a part of that program during the 1972-73 school year.

The objectives dealing with materials development have been met for the Spanish Reading program. All eight reading booklets have been completed and the first five booklets have been revised. Objectives concerning development of teacher training materials have been partially met. Work is continuing on these objectives.

Objectives for staff development were generally met. Although there was no preservice training for teacher aides and mother aides, workshops were presented by the Spanish Reading supervisor/consultant during the first two weeks of school.

c. Modification of Long Range Objectives

Spanish reading is established as a viable instructional program in the kindergarten. It now appears that no more than three-fourths of the course can be covered in nine months. In the future, the last part of the course will be taught in first grade.

d. Modifications or Refinements of the Program

No modifications, other than revisions already made, are expected in the Spanish Reading Course.

e. General Assessment

Success in Spanish Reading has given the children in the project greater confidence as well as prerequisite skills needed to succeed in English reading. Second grade children write in either language with ease.

The popularity of the materials has been gratifying. Bilingual programs throughout the U.S. have been purchasing them all year. Next year a publisher will market them commercially nationwide, assuring even greater use of the instructional package.

- 3. English as a Second Language
 - a. The degree to which 1971-72 product/process objectives have been attained.
 - (1) Instruction (Product Objectives)
 - (a) Objective 59:
 The haghining a Second hearance (FSL) level I program has been field-test-time 10 Linder area. Hassocots and 1 first grade classicout for a total enrollment of approximately 500 students. The testing procedure for the and post-testing has, been modified to include only kindergorten students (only 1 first grade classroot is in the lovel I program). One-handred and twenty-five experimental students and one-hundred control students were randomly selected and interviewed at the beginning of the year to determine their ability to speak and comprehend oral English. A post-test of oral English ability and the Goodenough-Harris Drawing Test was administered to the sample during April 1972. (See Section B of this report.)
 - (b) Objective 60:

 The ESL level II program has been field-tested in 14 first grade and 2 second grade classrooms for a total enrollment of approximately 475 students. The testing procedure for preand post-testing has been modified to include only first grade students (only 2 second grade classrooms are in the level II program). Pretests were administered to 75 experimental and 77 control students in September 19/1. A post-test of Oral English and the Goodenough-Harris Drawing Test was administered to the experimental and control groups in April 1972. (See Section B of this report.)
 - (c) Objective 61:
 The Transitional English Reading program was field-tested in 15 first grade and 9 second grade classrooms with a total enrollment of approximately 675 students. No pretests were administered to these students, since it was assumed that they did not know how to read in English. A post-test was administered in April 1972, (See Section C of this report.)
 - (2) Instructions (Process Objectives)
 - (a) Objective 62:
 Teachers in the ESL level I program submitted teaching schedules to the project evaluator during October 1971.
 The schedules indicated that the level I classrooms were spending the suggested time allotments (2 1/2 to 3 hours) on the ESE activities.
 - (b) Objective 63:
 Interim tests have been administered in the ESL level I classrooms after completion of each 15 lessons. Results of the
 interim testing program are presented in Section E of this
 report.

- (c) Objective 66: Describe cost staries have loss submitted weekly by each teacher in the level 1 ESL program.
- (d) Objective 65:
 The Oral Anglian Test (Icvel I) has been revised on the basis of results obtained from the 1970-71 testing program.
- (e) Objective 66:
 Teachers in the DSL level II program submitted teaching schedules to the project evaluator during 0; ober 1971.
 The schedules indicated that the teachers were spending from 2 to 2 1/2 hours on ESL activities.
- (f) Objective 67:
 Interim tests have been administered by the classroom teachers in the ESL level II classrooms after coupletion of each 15 lessons. Results of the interim testing program are available in Section B of this report.
- (g) Objective 68:
 Teacher commentaries have been submitted weekly by each teacher in the level II ESL program.
- (h) Objective 69:
 The Oral English Test (level II) has been revised on the basis of results obtained during the 1970-71 testing program.
- (i) Objective 70:
 Students in the ESL level II program have written stories as a regular part of their ESL program. Samples of this creative writing have been transcribed by the project staff.
- (j) Objective 71:
 Students in the Transitional English Reading program are spending approximately 30 minutes per day. Teacher schedules were submitted to the project evaluator in October 1971.
 Teacher commentaries have been submitted weekly.
- (k) Objective 72:
 An interim cesting program has been established for the Transitional English Reading program: Results of the interim testing program are available in Section C of this report.
- (1) Objective 73:
 Teachers in the Transitional English Reading program have submitted teacher commentaries each week.

- (3) Development of Materials (Product Objectives)
 - (a) Chipering 74:
 Supplie interproceed lary lists were diveloped on the brais of comparations of the vocabulary words from the hill lime! I program and the vocabulary words used in the Trinoitional Indian Reading program. The supplementary vocabulary words were then inverted in the ESL level 1 Lessons.
 - (b) Objective 75:
 The teacher's passual for ESL level I and Level II has not been revised because no major revisions were needed.
 - (c) Objective 76:
 The teacher training program for ESL level I and level II has been partially developed. Slides and yideotapes have been developed, but the program has not been completed.
 - (d) Objective 77:
 The eight Transitional English Reading booklets were not completed during the 1970-71 school year. Booklets 1 through 5 were completed last year, while booklets 6 through 8 were completed this year. Booklets 4 and 5 were revised on the basis of feedback from the 1970-71 pilot test.
 - (e) Objective 78:
 Interim tests have been developed for reading booklets 1 through 5. The criterion test to be used as a post-test was revised as scheduled.
 - (f) Objective 79:

 A second year Transitional English Reading program was not developed this year because the level I program was not completed during 1970-71 as scheduled, and staff personnel were not available to work on both the level I and level II programs simultaneously.
 - (g) Objective 80:
 Since the development of the level I Transitional English
 Reading program had to be completed this year, development of
 a teacher training program has been delayed. However, slides
 and videotapes have been produced and work will continue
 during the summer.
- (4) Development of Materials (Process Objectives)
 - Objectives 81 and 82:
 Vocabulary lists for two reading series have been compiled and cross-checked with the vocabulary lists for the ESL program. In addition, vocabulary words appearing in the Transitional English Reading program but not in the ESL level I program have been inserted in the level I lessons.

- (b) -Objectives 83 and 84:

 Three scripts and a series of slide pictures have been produced for the teacher training program. However, the program has not been "put together" yet.
- Although some revisions of the Transitional English Reading program have been made (booklets 4 and 5), the time needed to complete the last 3 booklets has delayed the revision of the other booklets. Consequently, a consultant has not been hired to review and evaluate suggested revisions.
- (d) Objectives 87 and 88:
 The project director cancelled the objectives dealing with computer search of vocabulary of basal readers because of a change in state adopted textbooks.
- (e) Objective 89:
 A second year reading program, Transition to Basal Reading, was scheduled for development this year. However, because of the time needed to complete the Transitional English Reading program, the development of the second year program has been rescheduled for the 1972-73 fiscal year.
- (f) Objectives 90 and 91:
 Videotapes have been made, but must be edited and assembled.
 A sound film has been made and is being edited. However, scripts for the teacher training program have not been written.
- (5) Staff Development (Product Objectives)
 - (a) Objective 92:
 The plan for preservice and in-service education training consisted of a preservice workshop in August for teachers and teacher aides, in-service workshops during the first two weeks of school for mother aides (repeated every 12 weeks for new mother aides), and individual assistance for tutors.
 - (b) Objective 93:
 Supervisor/consultants were assigned to the ESL program and the Transitional English Reading program. Due to the number of classrooms in the ESL program, the supervisor/ consultant has not visited every classroom weekly. Consequently, in the ESL program, the less experienced teachers have been visited once a week while the experienced teachers have been visited once every two weeks. The Transitional English Reading supervisor/ consultant has visited each classroom weekly. Reports to the project director have been oral, followed by written bi-weekly reports.

- (6) Staff Development (Process Objectives)
 - (a) Objectives 94 and 95:

 A two-day in-vervice workshop covering all components of the Bilingual Project was conducted on August 24-25, 1971. The workshop was attended by 41 of the 42 project teachers. Teacher aides and mother aides did not attend the workshop. Mother aides attended workshops or received individual assistance from the supervisor/consultant during the school year. Training was repeated at 12 week intervals for newly employed mother aides.
 - (b) Objectives 96 and 97:

 The supervisor/consultant for ESL has visited each classroom at least bi-weekly during the school year. Because of the number of classrooms in the ESL program, only the less experienced teachers could be visited weekly. The supervisor/consultant for Transitional English Reading has visited each classroom weekly as scheduled.
 - (c) Objective 98:
 Although bi-monthly meetings were not held as scheduled, the project director has net with the teachers in both programs four times during the year.
- b. An analysis of the successes and failures in meeting performance objectives.

Interim test data indicate that from 70% to 100% of the classrooms have achieved the criteria. These results suggest that it is not realistic to expect all classrooms to achieve the criterion on each interim test. Records of progress indicate that 30 of the 35 classrooms in the two programs completed at least 90% of the lessons during the year.

Interim test data from the Transitional English Reading program indicate that from 70% to 100% of the classrooms have achieved the criterion. Again, the results indicate that it is not realistic to expect all classrooms to achieve the criterion on every interim test.

Development of materials has not progressed as rapidly as expected in either the ESL program or the Transitional English Reading program. The teacher training programs have not been completed although work is continuing. The second year Transition to Basal Reading will not be developed this year because the development of the first year Transitional English Reading program has taken more time than anticipated.

Staff development objectives for the ESL program and Transitional English Reading programs have generally been met. Teachers in the ESL program have not been visited weekly by the supervisor/consultant because of the number of classrooms. However, less experienced teachers have been visited one for more times per week as needed.

c. Modification of Long Range Objectives

No change in the objectives for the oral ESL program is anticipated.

d. Modifications or Refinements of the Program

No modifications are expected in the ESL course.

e. General Assessment'

Acceptance of the two ROCK Kits nationwide is verified by the sales records of the distributor of these materials. The Melton Book Company of Dallas. There are now over 1200 classrooms in all parts of the country using the ESL lessons and activities.

4. Social Education

- a. The degree to which 1971-72 product/process objectives have been attained.
 - (1) Instruction (Product Objectives)
 - (a) Objective 99:

 The level I Social Education program has been field-tested in 13 first grade classrooms with a total enrollment of approximately 375 students. No pretesting was done in September because a test had not been developed. In addition, the Brown Self Concept Referents was not administered because it was concluded that the test would not yield information of significance to the project. A post-test and the Goodenough-Harris Drawing Test was administered in April 1972. (See Section D of this report.)
 - (b) Objective 100:

 A level II. Social Education program is being developed and pilot-tested in 2 first grade and 9 second grade classrooms with a total enrollment of approximately 300 students. Since the materials are being developed this year, no pretesting was planned. A post-test has not been developed for this program.
 - (2) Instruction (Process Objectives)
 - (a) Objectives 101 and 105:

 The students participating in level I and level II programs have spent an average of 30 minutes per day in activities related to the programs:
 - (b) Objectives 102 104: 105 and 107:
 Interim testing programs have not been developed in either the level I or level II Social Education programs. The end-of-year test for the level I Social Education was revised on the basis of the 1970-71 test results.
 - (3) Development of Materials (Product Objectives)
 - (a) Objective 108:
 The level i Social Education program has been revised this year. The first unit, which was presented in English last year, was re-written in Spanish. One additional Spanish unit has been revised. None of the other 5 English units have been revised.
 - (b) Objective 109:
 Interim tests have not been developed for the level I Social,
 Education program. Several types of tests have been written and pilot-tested, but no satisfactory format has been identified. The primary difficulty has been to find a technique of testing which will differentiate knowledge of facts from ability to apply concepts.

- (c) Objective 110:

 A level II Social Education program was developed this year. The level II program consists of eight units, all written in Spanish.
- (d) Objective 111:

 A teacher training program for the level I and level II Social Education programs has not been-developed. This objective has been postponed until next year. However, data pertaining to the teacher training are filed with the project evaluator.
- (4) Development of Materials (Process Objectives)
 - (a) Objective 112:
 Revisions in the level I Social Education units were made on the basis of feedback from the teachers and from classroom observation by the Social Education supervisor/consultant.
 The first unit, "First Days in School", was revised and translated into Spanish on the recommendation of the teachers.
 Minor revisions were also made in the second Spanish unit.
 - (b) Objective 113:
 Supplementary reading materials for the level I Social Education program include stories written by the project staff and commercial story books in Spanish. The project staff has written six short stories to reinforce concepts introduced in the level I Social Education units. A total of 39 titles have been purchased as reinforcement for both the Spanish Reading program and the Social Education program. Spanish writing activities consist of periodic creative writing assignments.
 - (c) Objective 114:

 Interim tests developed by the Southwest Educational Development Laboratory were discontinued last year because they were not considered valid. Consequently, satisfactory interim tests have not been developed for the level I Social Education program. Several types of tests have been written and pilot-tested, but none of the tests were considered valid. Group testing was not satisfactory, and individual tests have been difficult to design because of the concepts being tested. Test development activities will continue until a satisfactory format for interim testing is identified.
 - (d) Objectives 115 and 116:

 The level II Social Education program was developed as scheduled. The program has been modified in that all units are presented in Spanish and units developed by the Southwest Educational Development Laboratory will not be used. The level II program is designed to follow the level I program. The level I program presents the individual in the group while the level II program deals with group interrelationships. Six short stories have been written to reinforce the concepts presented in the level II units. Creative writing is scheduled periodically as a planned activity within the program.

- (e) Objectives 117 and 118:

 Development of a tenemer training program in Social Education has been postponed until next year. However, all servers teachers who participated in the program during the 1970-11 school year. Gene interviewed during the summer of 1971 and their comments filed with the project evaluator.
- (5) Staff Development (Product Objectives)
 - (a) Objective 119:
 The plan for preservice and in-service training consisted of a preservice workshop in August for teachers and teacher aides, in-service workshops during the first two weeks of school for mother aides (repeated every 12 weeks for new mother aides), and individual assistance for the tutors.
 - (b) Objective 120:

 A supervisor/consultant has been assigned for the Social Education program. The supervisor/consultant has served the dual function of assisting classroom teachers and writing for the level II Social Education program. Oral reports to the project director followed by written, hi-weekly reports have replaced the supervisor report used last year.
- (6) Staff Development (Process Objectives)
 - (a) Objective 121:

 A two-day inservice workshop covering all components of the Bilingual Project was conducted on August 24-25, 1971. The workshop was attended by 41 of the 42 project teachers. Teacher aides and mother aides did not attend the workshop.
 - (b) Objective 122:

 Mother aides attended workshops or received individual assistance from the Social Education supervisor/consultant. Training sessions were conducted as new mother aides were hired.
 - (c) Objective 123:
 The supervisor/consultant served a dual role of assisting classroom teachers and writing for the level II Social Education program.
 Consequently, she did not observe in each classroom once each week
 as scheduled.
 - (d) Objective 124:

 The project director has met with the Social Education teachers periodically, although not bi-monthly, throughout the year.
- b. An analysis of the sucresses and failures in meeting performance objectives.

Materials development activities have progressed satisfactorily for the Social Education program. Development of supplementary materials and revision of the level I Social Education program have been accomplished. The level II is presently being written and is expected to be completed by the end of the fiscal year.

The most serious problem engountered within the Social Education program has been the development of interim and final achievement tooks for the level I and Tevel II programs. Tests of factual knowledge have yielded. Little useful information about the program and tests of the compute presented in the program have proved difficult to construct. These development will continue as a primary objective for the Social Education component for the 1972-73 school year.

Staff development activities have been limited because the Social Education supervisor/consultant has functioned both as a writer and a consultant to the teachers. Herever, observation in the project classrooms indicate that the project staff.

c. Modification of Long Range Objectives

The social education course has evolved into an all-purpose, multi-media, cross-discipline course taught in Spanish. Originally it was intended to be taught in English also. In the future the review of the lessons will be in English but all of the instruction will be in Spanish after first grade.

The content will include economics, ethics, anthropology, ecology, history, geography, music and drama.

d. Modifications or Refinements of the Program

All instruction will be in Spanish.

e. General Assessment

This course is the most popular one with the children. They have opportunities to express their feelings in the roles they play. They are given problems to be solved by the group instead of by each individual. These comperative efforts, applied to realistic situations related to humanksurvical, provide the children experience in the basics of interpersonal relations.

We have been unsuccessful in developing adequate test instruments for this course. Our purpose is to prepare the child to interact well with others and to understand the motivating factors that shape our lives. We cannot seem to find any way to measure whether or not the children are acquiring these skills and concepts.